

**Continental Business Center (aka Bridgeport Industrial Park) Fire
CERCLA Emergency Response
Bridgeport, Montgomery County, PA**

**RECORD OF USEPA ACTIVITIES
"OSC RECORD"**

BACKGROUND: A fire began in the Continental Business Center complex in Bridgeport, Montgomery County, PA, during the early afternoon of 15 May 01. The complex is located at Front & Ford Streets in Bridgeport along the Schuylkill River. A significant number of businesses and the contents of their buildings were lost. Although the fire was under control at 0330 on 16 May 01, a large area was still smouldering or subject to flare-ups after that time. Included in the smouldering and flare-up areas were a warehouse where a variety of chemicals were stored, 2 locations where large amounts of automobile and related auto maintenance supplies were stored, and several other smaller/limited areas where potentially hazardous or oily materials were stored.

The business complex is constructed within the buildings of an industrial facility that formerly manufactured a variety of fibres; Continental Diamond Fibre Company.

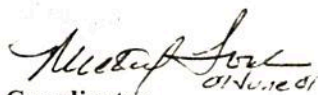
The OSC was initially requested on 16 May 01 to evaluate available information and provide assistance to Local Fire and Emergency Services officials regarding chemicals stored within the burning/smouldering buildings. Subsequently, the OSC was requested to provide air monitoring support and overall assistance regarding protection of environment from releases of oily material and hazardous substances resulting from necessary fire fighting runoff waters passing through the structures and facility and entering the Schuylkill River and a canal which runs beneath the business park. EPA was also requested to provide for Site Safety.

After the OSC identified chemicals and hazardous substances stored in the MCC Warehousing area and the oily materials stored in the George's Auto Supply area, which were both still engaged in fire suppression efforts, the OSC requested the continued support of the Bridgeport Fire Departments to ensure that chemicals engaged in fire could be safely addressed. Bridgeport continued fire suppression efforts and ultimately continued to leave hose and nozzle equipment on the Site for use in mitigating the emergency condition posed by uncontrolled chemical release and oily material discharge and severely compromised containers and structures securing these chemical and oily materials.

Figures developed or obtained during the course of the incident response are contained in **APPENDIX 1**. A list of appendices and figures and tables is contained on the following page.

The following pages contain daily summaries of the activities of the OSC and the OSC's resources.

Michael Towle,
Federal On-Scene Coordinator
01 June 01



01 June 01

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16 MAY 01 - Wednesday

SIGNIFICANT ISSUES

The Borough of Bridgeport Fire Chief is the Incident Commander. The EPA OSC is coordinating with the Montgomery County Emergency Services Director to deal with environmental issues. The OSC is also coordinating with PADEP representatives at the scene and in Regional Office.

See POLREP 01 for additional information.

DAILY PLAN

Survey and assess overall situation and environmental issues

Obtain and review available MSDS

Interview owner representatives regarding potential chemicals within the complex

Evaluate need to implement air monitoring

EPA ACTIONS

(1) After dispatch, the OSC met with Jim Kelly, Montgomery County Emergency Services Director, to survey overall situation, meet Site personnel, and gain access to available MSDS. The OSC informed the Incident Commander (Bridgeport Fire) that he was onsite.

(2) OSC met with the owner of the complex and staff to gain access to Site layout information and verbal information regarding the type of businesses in the complex and potential materials stored at each location. Businesses included a warehouse where a variety of chemicals were stored (MCC warehousing, inc. located in M building), two locations where a variety of oils and related automobile maintenance supplies were stored (George's Auto Supply located in M and C buildings), a small lawn maintenance business with possible pesticide chemicals, a business that provides coatings (Jet-Hot), a tool and machine shop, a furniture restoration business with possible strippers in vats/tubs, printer and label businesses with inks and related chemicals. There were also a variety of other businesses with possible small amounts of general maintenance chemicals. The OSC was given a map of the complex and a list of businesses (**APPENDIX I**). The OSC determined that the chemical storage warehouse and the auto supply locations posed the most threat to human health and the environment based upon the probable type and amount of chemicals within these buildings, the locations of these businesses near drains to the River, the current discharge of these materials to waterways (and possibly to air) and the current stage of fire-fighting efforts. The incident posed immediate threat to human health and the environment.

(3) The OSC contacted the EPA Regional Office and received information about a previous assessment of the warehouse location (MCC Warehousing, inc.) within the complex. The OSC learned that a variety of chemicals were stored and that caprolactam was among the chemicals stored in larger quantities. Caprolactam is a combustible and corrosive organic compound, toxic by inhalation, and soluble in water and petroleum distillate.

(4) OSC met with PADEP representatives on Site and received update regarding efforts to contain oily material running from the Site. Oily material enters the River through storm drains on the Site. Oily material is contained on the Schuylkill River with several areas of containment boom, absorbent boom, and absorbent pads. Lewis Environmental (hired by the owner Bushar Corp.) has several boats onsite to tend and rehabilitate boom. Oily material is also entering a canal that runs under the business complex. The canal enters the River downstream of the Site. Boom is also present in the canal. Contained oily material is removed by vacuum trucks and brought to the business complex for storage in tanks.

(5) OSC met with PEMA and Montgomery County Emergency Services. OSC reviewed available MSDS and chemical inventory information available for the warehouse location (MCC Warehousing, inc.) within the complex. PADEP waste management personnel were also reviewing these files. The inventories were not up to date. The OSC determined that the inventories were appropriate for possible considerations for chemicals in the warehouse (e.g., a "list of possibilities") and for development of an air monitoring list, but that additional information would be needed from the owner of the warehouse business or from the clients of the warehouse. The main chemicals in the warehouse area appeared to be pigments, dyes, and chemicals used in the manufacture of plastics, synthetic fibers, and pigment or dyeing industry. According to available information, onsite facilities may not have been required to file Right-to-Know information with outside agencies.

(6) The OSC contacted PADEP to discuss the need for air monitoring. PADEP intended to rely on the air monitoring information from Norristown. The OSC determined that air monitoring should be accomplished based upon smoke and odor in downtown areas. A plan was developed to enhance PADEP efforts and to monitor only for specific parameters after a screening process identified particular chemicals of concern in the warehouse. An analysis of every chemical was not conducted due to 1) the large amount of possible chemicals, 2) the urgency of the situation, 3) the probability that organic compounds were likely completely burned in the hot fire and degraded to normal oxides of carbon and nitrogen characteristic of most structure fires, 4) the probability that several possible chemical breakdown products would also emanate from a routine structure fire and not be indicative of particularly dangerous conditions, 5) the fact that many of the chemicals were inorganic and would not readily burn, and 6) the need for a definitive plan to determine if chemical emissions were indeed an item of concern. The OSC took the lead for air monitoring. The OSC was concerned about potential increases in chemical emissions as the heat of the fire decreased and combustion of organic compounds was no longer complete.

(7) The OSC requested that PADEP contact Montgomery County Health Department to relay information regarding the fire and possible chemical release.

(8) The owner of the warehouse and the warehouse business were contacted and requested to meet with the OSC and PADEP on 17 May 01. The OSC would relay concerns about the warehouse to the owner and operator of the warehouse and the complex. After the meetings, the OSC would evaluate the need for enforcement actions.

(9) The OSC met with PADEP and evaluated oily material containment and recovery operations. The oily material likely contains a variety of chemical substances originating from the Site based upon initial review of MSDS and observations of the likely business operations within the complex. Two locations within the overall complex stored large quantities of oils (automobile supply), but the discharges likely mingled with non-oil discharges from other areas of the Site. The oily material containment and recovery operations were effectively containing and recovering oily material discharged from the fire fighting operations. The OSC determined that no additional operations were practical and/or required at this time to further protect navigable waters from the oily discharge. The OSC would continue to monitor the containment and recovery efforts. The oily material containment and recovery operations are conducted by Lewis Environmental for the complex owner (Bushar Corp.). The mixing of oily and chemical substances likely negates the ability to use OPA authorities.

(10) The OSC obtained the services of chemists (START contractor and EPA CEPP personnel) to review available chemical information consisting of the possible inventories within the MCC location. The inventories represented the universe of possible chemicals that could be within the warehouse although quantity information was not available (**APPENDIX 2**). Due to the need to conduct air monitoring and determine if hazardous constituents could exist in the smoke emission as the fire temperatures began to subside, the OSC proceeded with the evaluation in the absence of definitive inventory information.

(11) Based upon the chemist and the OSC review of possible chemicals within the warehouse location a listing was developed of chemicals that may pose a potential threat to human health or the environment based upon their toxicity or potential emission/degradation in the fire. These chemicals of potential concern are identified by associated

notations on the possible inventory sheets. Once this screening was conducted, the chemists examined available MSDS for these chemicals of potential concern. The examination focused on the potential amount of this chemical in the fire based upon the percentage existing in the products, the number of products that contained the chemical, and a quick review of potential breakdown or degradation products. The MSDS review generated a list of chemicals of potential concern (identified in **APPENDIX 2**). The OSC acknowledged that the list may not be comprehensive. Amine compounds were a potential release concern in the runoff. Since the pH would rise in this situation, the runoff liquids would be analyzed; if pH began to rise above 8, the level of concern about contaminated runoff would increase.

(12) Command officials (Montgomery County Emergency Services and Bridgeport Fire) met with the OSC to receive initial information regarding possible chemical inventories and potentially hazardous chemicals that did not completely burn off in the fire. This meeting resulted in the initiation of air monitoring as a task for the OSC. The OSC determined that discussion with ATSDR would occur before the list of parameters would be finalized.

(13) The OSC met with Bridgeport Fire to relay available chemical information. Bridgeport Fire was directing Site Safety.

(14) The OSC was requested to attend a media briefing at 1530 hrs. The OSC requested CIC support from the Regional Office. The OSC met with PADEP spokesperson already onsite prior to this meeting and relayed all EPA information so that PADEP could be the point of contact for environmental issues. PADEP took the lead for environmental information during this briefing. EPA CIC recorded information and met with media during the evening.

(15) Demolition contractors onsite this day to assist fire suppression efforts. The contractors (Schultz Demolition and Domino Salvage) were assisting the Borough of Bridgeport. The OSC advised that demolition in contaminated areas or areas structurally connected with the MCC warehouse be coordinated through the OSC to avoid unnecessary chemical releases.

(16) The OSC contacted ATSDR and discussed the chemicals of potential concern. The OSC needed to know how these chemicals might react in a fire and what their degradation products might be. The discussion resulted in the identification of several monitoring parameters useful to distinguish possible chemical emission from parameters that could emanate from a routine structure fire or parameters that are not particularly dangerous. ATSDR also advised on PPE when working in the chemicals. The list of potential degradation products included amines, ammonia, HCN, HCL, and oxides of N, C, and P. The OSC determined, based upon consultation with ATSDR, that amines, ammonia, HCN, and HCL would be initially monitored to determine if the emission contained significant levels of contaminant. The information supporting the air monitoring list follows. The list is not a complete representation of the discussion between the OSC and ATSDR since other chemical degradations would require the same monitoring parameters.

Sample Information Supporting Specific Initial Air Monitoring and Need for PPE and Containment

| <u>CHEMICAL</u> | <u>EFFECT and MONITORING PARAMETER</u> |
|---|--|
| Caprolactam | corrosive, poss.CNS,pulmonary effect, HCN |
| polyamine (amines) | NH ₃ compounds, irritant |
| isocyanates | HCN |
| N,N -diphenyl -1,4, Phenylenediamine + | HCN (low), NH ₃ |
| Phosphonic acid salts | oxides of phosphorus, weak acid, pulmonary effects |
| Formaldehyde | dermal irritant, fish kill potential, sensitizer |
| 1-methyl-3,5,7, - triaza-1-azoniatricyclodecane | possible HCL |
| 2-(thiocyanomethylthio) benzothiazole | possible HCN |

TABLE 1

(17) The OSC contacted START contractor (Tetra Tech) this night and directed air monitoring be conducted overnight. Areas were to include downwind/downtown areas. Locations along Fourth St., Depot St., Front St., and Mill St. were to be monitored.

(18) Oil containment and recovery operations continue for 24 hour periods until further notice.

17 MAY 01 - Thursday

SIGNIFICANT ISSUES

Analytical results of runoff water entering the canal and the River collected by PADEP will not be available until the end of next week. Additional information will be needed to determine if additional measures will be necessary to contain or otherwise control runoff waters from the contaminated areas, especially MCC Warehousing, inc. where discharges could be more likely to be soluble in water. The efforts to date focus on the floating layer of runoff water (oily layer). Based upon initial review of the chemicals and products involved in the fire, it is likely that many of the organic contaminants will reside in the oily layer, but some of the potential solvents and inorganic contaminants will not be removed in the oily layer. The OSC has directed that the START contractor (Tetra Tech) collect a sample of the runoff water in the canal and analyze those samples for a variety of organic and inorganic parameters. The analytical results will enable the OSC to determine if additional containment measures or operational procedures are warranted.

Air monitoring was conducted during the overnight period of 16/17 May. The monitoring results do not indicate specific chemical degradation products in downtown/downwind areas. The need for continued air monitoring will be discussed this day with pertinent personnel. Monitored parameters include amines, ammonia, HCN, and HCL. Air monitoring was initiated on the Site this day. In addition to the afore-mentioned parameters, volatile organic compounds were also monitored. The OSC also requested monitoring for total particulate matter due to the presence of the large amount of inorganics. Negligible levels of VOCs were detected on Site. All downwind/off-Site areas continued to indicate no presence of chemical emission.

The burned and collapsed condition of the MCC Warehousing area allowed for no protection or containment of chemicals stored within. Additionally, many of the chemicals were stored in combustible materials (e.g., plastic drums, bags, boxes, etc.) such that the chemicals were no longer contained in their packaging. The resulting situation caused a mixture of a variety of materials in a building that could no longer contain their release. These resulted in a threat to the public health and the environment should unforeseen circumstances cause release or fire continued the ongoing release. Additionally, the appearance of the waterways and the condition of the buildings suggested that chemical release was ongoing to the environment. Immediate action was necessary to stabilize this situation.

Fire suppression operations continued this day as small fires, hot areas, flare-ups, and smoldering debris existed throughout the Site. Night crews reported that several drums within the MCC Warehousing facility ignited during the night. Foam was used this day in the George's Auto Supply location of C building. Demolition operations this day occurred in the J building area where unstable high walls continued to limit effective access to all smoldering areas and posed a threat to adjacent operations.

Oily material containment and recovery operations continue this day with boom, recovery, and vacuum operations continuing on the Schuylkill River and canal. The collection point on the canal is at the location where the canal enters

the River. Oily material is not visible downstream of the final boom on the River.

Local and State fire investigators along with the ATF initiated investigation of fire cause in the C building where the fire started.

The Borough of Bridgeport Fire Chief is the Incident Commander. Bridgeport, EPA (and PADEP), Montgomery County Emergency Services, and the owner representative (variable) formed Unified Command. The OSC, PADEP, and the owner address all environmental issues. This Command coordinated with fire investigation operations and fire suppression operations through the Bridgeport Fire Chief (Incident Commander). The OSC (and PADEP) will direct environmental operations through the owner's contractor representatives. The OSC (and PADEP) and START (Tetra Tech) conduct planning activities. Bridgeport maintains the Safety Officer and Information Officer functions. Bridgeport police maintain Site security.

See POLREP 02 for additional information.

DAILY PLAN

- Continue with more detailed evaluation of information about chemical warehouse location
- Develop strategy for addressing immediate threat conditions in MCC Warehousing
- Evaluate air monitoring information and recommend future actions
- Gather more information about the history of the facility
- Continue containment and recovery of oily material operations
- Continue air monitoring
- Evaluate/Advise on Site Safety
- Initiate development of strategy to address overall Site environmental characterization

EPA ACTIONS

(1) This day a Unified Command was established to address environmental issues at the Site. The Command participants include OSC (and PADEP), Montgomery County Emergency Services, Bridgeport Fire, and available representative of the owner. At a 1000 meeting, the OSC advised and Command agreed to continue and expand air monitoring to include the perimeter of the Site and operational areas.

(2) The OSC and PADEP met with the owner of the warehouse business in which a variety of chemicals were stored. The purpose of the meeting was to obtain, if possible, information about the amount and location of chemicals within the warehouse. The owner was able to provide a sketch map of the approximate location where various clients stored their materials (**see Appendix 1**). The owner also agreed to request specific inventory information from his three main clients identified by the OSC and forward that information to the OSC and PADEP by requesting his clients to contact the OSC or PADEP. The OSC informed the owner that the warehouse location would likely require emergency stabilization actions to protect public health and the environment.

(3) The OSC was contacted by three main clients of the warehouse (Durr Marketing Associates, Pentachem, inc., and Bruggemann Chemical US Inc.). Each of these companies agreed to supply a current inventory of chemicals as quickly as possible. The information will be sent to the PADEP offices in Conshohocken due to its proximity to the Site. The Durr representative informed the OSC of the existence of approximately 50,000 pounds of lead in various pigments in the warehouse and requested to be present when these materials were removed.

(4) The OSC informed the owner of the complex about the need for emergency stabilization actions at the chemical warehouse location. The complex owner agreed to take steps to initiate these actions.

(5) EPA START contractor (Tetra Tech) initiated routine air monitoring this day around the Site perimeter. Monitoring results do not indicate significant chemical release. Monitoring will continue to ensure the protection of the nearby residential and commercial community.

(6) The OSC and PADEP and Montgomery County Emergency Services met this day to determine an overall strategy for dealing with the immediate stabilization of the MCC Warehousing inc. facility. The strategy and needs were communicated to the owner. The basic strategy developed called for demolition of unsafe areas to allow for removal of unsecured chemicals. The removal of bulk chemicals to a secure staging area would mitigate the emergency condition. The Strategy for immediate operations did not include cleanup of all chemicals.

(7) The OSC and PADEP met with representatives of the owner at the MCC Warehousing, inc. location at 1445 hrs. this day. The OSC informed the parties that an emergency stabilization action was required to protect public health and the environment. The action was to include activities to remove the unsecured chemicals (burned drums, totes, bags, pallets, etc..) from the unsecured building (burned and partially collapsed) such that chemicals do not migrate into the canal and River at excessive levels. Additionally, since the location and the quantity of specific chemicals was unknown and portions of the building were still burning/smoldering, the MCC Warehousing, inc. location posed an immediate threat to human health. The OSC advised of the probable need to demolish structures while removing chemicals to secure locations. The OSC advised that the request was for immediate stabilization (not complete cleanup) of the location. The owner's representatives agreed to have contractors onsite next day.

(8) The OSC inspected the canal location where heavy oily material continues to be recovered. The containment remains effective. Discharge from the canal enters the Schuylkill River. The contractor has additional boom and absorbent capacity at this and downstream locations.

(9) The OSC met with Bridgeport Fire about Site Safety (Site Safety Officer Gallagher) and forwarded the advice of ATSDR regarding PPE when working with the chemicals. Since many of the chemicals are dermal and respiratory irritants, butyl rubber or neoprene gloves are recommended along with Level C (minimum) and Level B (dependent upon air monitoring) respiratory protection.

(10) Montgomery County requested copies of actual inventory information received by EPA.

(11) OSC discussed Site situation with Federal Natural Resource Trustees. USFWS (Roberts) to receive future information about potential damages.

(12) OSC discussed Site/incident information release this day with PADEP and EPA Regional Office. Based upon significant economic loss and ongoing fire investigation. Environmental issues have not been of particular interest to the media and public; although media interest continues to be high. The OSC requested that EPA and PADEP Offices coordinate release of information from home office and enable Bridgeport to handle information release at Site. The OSC will advise Regional EPA Office of increased interest in environmental information. A joint information center is not established.

(13) PADEP requested an underflow structure between the C building and the Schuylkill River based upon the continual release of oily material to the River via overland flow at the location of George Auto Supply. PADEP maintained the lead for oily containment and recovery operations.

(14) The OSC initiated collection of information necessary to characterize overall environmental situation at the overall complex. The START contractor was requested to begin to characterize and document known drainage. This effort will begin in earnest after completion of fire investigation activities (due to current inability to access fire cause investigation area).

18 MAY 01 - Friday

SIGNIFICANT ISSUES

Unified Command meeting this day resulted in EPA assumption of Site Safety Officer responsibilities. EPA will develop and implement, among other things, a Safety Plan that enables fire investigators and fire suppression personnel to be confident they are protected from Site chemical hazards. The OSC requested assistance from the US Coast Guard Atlantic Strike Team in this matter. The OSC also requested the EPA Mobile Command Post to facilitate Unified Command activities.

Pressurized aerosol containers in the George Auto Supply location of M building ignited this day. Fire suppression activities focused on spreading remaining aerosol cans and pressurized containers. When fire was not evident, volatile organic compound concentration levels increased in the downwind air. Unified Command decisions were made to allow the fire to burn to reduce available fuel in this area. A fog spray was set up to keep this area cool and wet during the night.

Lewis Environmental reports that anchors on the booms periodically slip downriver. The bottom of the River is not well suited to anchoring devices. The contractor advises that if boom were to be re-anchored, a good deal of the oily material now trapped in the cradle of the boom would be lost. Although the OSC witnessed oily sheen downriver this day, efforts will focus on removing oily material from the boom rather than immediate repositioning efforts. A noticeable decrease in oily runoff is observed due to decreased fire-fighting efforts.

Air monitoring continued this day and was also conducted at a building in Norristown where employees reported feeling ill. Norristown was downwind of the fire scene this day. The EPA air monitoring did not identify increased contaminant levels; although smoke was evident.

Fire suppression efforts continued throughout this day

Local, State, and Federal fire cause investigation personnel continue to work at the C building.

See POLREP 03 for additional information.

DAILY PLAN

- Characterize runoff water from the canal
- Develop and Implement Site Safety Plan, including continued air monitoring
- Characterize Site drainage pathways
- Coordinate initiation of stabilization operations at MCC Warehousing
- Continue containment and recovery of oily material

EPA ACTIONS

(1) contractors were onsite this day (0800) to view the MCC Warehousing location and submit proposals to the owner to conduct stabilization activities. The OSC learned from the owner that he indeed intended to conduct stabilization activities.

(2) START contractor (Tetra Tech) collects a sample of runoff water from the canal. The results are expected 21 May 01. The sample will be analyzed for a wide variety of parameters. The results will be used to better evaluate and decide upon the tactics to control offsite drainage of fire-fighting water and precipitation runoff. The collapsed condition of many of the structures will enable precipitation to facilitate migration of contaminants directly into the canal and River.

Fire-fighting runoff continues to run uncontrolled into the canal and River; absorbents are used to remove oily material.

(3) Air monitoring this day continues to show negligible concentrations of chemicals in Site emissions.

(4) EPA START contractor (Tetra Tech) conducted air monitoring at a building in Norristown located downwind of the Site. Employees of the building reported feeling ill this day. The EPA monitoring effort did not indicate elevated concentrations of chemicals believed to be derived from the incident.

(5) Regional management onsite this day.

(6) The OSC and PADEP received and reviewed an old print (layout) of the former Continental Diamond Fibre Company facility prior to its development into the current Continental Center business park. The Continental Diamond Fibre Company period of operation at this location is unknown. This figure was used to identify basement areas and other potential areas of concern. The OSC met with the owner to further identify basement areas and how they might drain. Drainage in the M building cannot be definitively identified. J building basement drainage occurs through at least one 24 inch pipe according to the owner representative.

(7) The OSC, USCG-AST, Montgomery County Emergency Services, PADEP, and Bridgeport officials surveyed the River bank this day to observe Site drainage, runoff areas, and oily material containment and recovery operations. Oily sheen was observed down river of the final boom and determined to result from increased amount of oily pads in the cradle of the boom. OSC advised that these pads be changed or removed. The absorbent material in the booms will have to be removed first. The contractor reports that the boom anchors periodically slip.

(8) The OSC contacted the Montgomery County Health Department regarding the current health advisory posted by the Department. The Department requested whether they could lift the advisory. The OSC informed the Department that if the advisory was based upon smoke alone or smoke from a large structure fire, then the Department should consider keeping or lifting the advisory based upon standard operating procedures. If the advisory is based upon chemicals, then the OSC advises that the Department could lift its advisory.

(9) The OSC provided Local Government Reimbursement information to the Montgomery County Emergency Services director. The Fire Departments and HazMat Teams have spent a considerable amount of resources and equipment to address this incident. Included, are significant resources and equipment to initially keep fire from the chemical and oily material storage areas, then to help OSC reduce fire in these areas to enable proper environmental stabilization.

(10) The OSC and PADEP met with the Site owner and his representatives regarding strategy for stabilization of the MCC Warehousing location. The owner indicated that he is now selecting a contractor to conduct this work and expects them onsite tomorrow (19 May 01). The OSC requested that the contractor meet with PADEP and OSC to receive available chemical information.

(11) START identified locations of visible storm drains.

19 MAY 01 - Saturday

SIGNIFICANT ISSUES

Fire cause investigation effort was completed this day at the Site. The investigators demobilized at approximately 1600 hrs. Site security responsibility was transferred to the Site owner which hired a security service.

Fire suppression activities this day focused on an area within the J building basement which has ignited large wooden timbers and the area of C building near the Auto Supply building. After completion of the fire cause investigation, ground crews went through the C buildings and addressed hot spots by raking or otherwise moving smouldering remains. The basement fire in J building was extinguished with aerial spray. After this day, fire/smouldering/smoke is expected only in M building near the location of MCC Warehousing.

Stabilization activities were initiated this day in the MCC warehouse area.

Oily material containment and recovery continued this day

Air monitoring activities continued this day including posting results at the Command Post.

At the morning Command meeting, the OSC advised Site personnel of safety procedures, evacuation signals, evacuation routes, muster points and requested that each work zone identify a single person responsible for accountability. A radio (provided by Montgomery County Emergency Services) was distributed to each responsible individual. EPA would use a 5 mg/cubic meter particulate and 5 ppm VOC concentration in addition to routine monitoring parameters to initiate Site alarms. Site Safety Plan document was completed this day.

MCC Warehouse stabilization operations between 0800 and approximately 1800 this day.

See POLREPs 04 and 05 for additional information

DAILY PLAN

Initiate stabilization of MCC Warehousing location
Review available actual inventory information
Continue oily material containment and recovery operations
Continue air monitoring
Initiate overall environmental assessment of complex
Implement Site Safety Plan

EPA ACTIONS

(1) 1000 and 1600 command/safety meetings conducted this day.

(2) The OSC reviewed actual inventory information submitted by Durr Marketing Associates and Pentachem. These companies were requested to submit inventories of chemicals believed to be within the warehouse. Actual inventory information is contained in **APPENDIX 3**. Information indicates that sulfur dioxide should be considered as a monitoring parameter. The initial area where stabilization operations will commence is the northwestern portion of the warehouse where Durr materials are stored (also the location of a ramp and adjacent staging areas). A summary of the Durr Marketing chemicals and issues of concern follows:

TABLE 2

DURR Marketing Associates

inventory chemicals are mainly pigments

SPECIFIC RELEASE ISSUES

Lead 52,004.2 pounds
Naphthalene 110 pounds

GENERAL CHEMICALS AND ELEMENTS

Lead Chromate
Lead
Chromium
Lead Sulphate
Molybdenum compounds
Antimony Trioxide
Antimony
Aluminum Oxide
Aluminum
Barium Sulfate
Barium
Zinc Oxide
Zinc Sulfide
Zinc
Barium metaborate monohydrate
Boron
Titanium dioxide
Zirconium dioxide
manganese

GENERAL DECOMPOSITION PRODUCTS

Lead Oxides
Chromium Oxides
Antimony Oxides
Carbon Oxides
Nitrogen Oxides
Barium salts
Organic vapours (e.g., Hansa Yellow DCC 1120,7074 and other flammable paint pigments)

SPECIFIC DURR CHEMICALS of POTENTIAL CONCERN

BUSAN 1078 (440 pounds)
2-methyl-4-isothiazolin-3-one
5-chloro-2-methyl-4-isothiazolin-3-one
magnesium nitrate

Corrosive, irritant, sensitizer, water soluble liquid decomposition to Sulphur dioxide, HCL, NOX

BUSAN 1025 (2235 pounds)
2-(thiocyanomethylthio)benzothiazole
methylene bis(thiocyanate)
aromatic solvent
N-methyl-2-pyrrolidone
naphthalene

Combustible, corrosive, sensitizer, toxic, irritant, liquid, insoluble, decomposition to cyanide salts. Thermal decomposition to toxic vapors of HCN and sulfur dioxide (fire = CO, NO, SO)

BUSAN 1024 (2790 pounds)
Formaldehyde
1-methyl-3,5,7-triaza-1-azoniatricyclo
decane chloride

Soluble, irritant, contact with amines could cause Ammonia, and other amine release. Flame may cause oxides of carbon and nitrogen and HCL

Flammable PAINT PIGMENTS

DCC1112 (Yellow T.Y.) 200 pounds
DCC 6005 (Bon Maroon) 375 pounds (contains manganese)
DCC 2220,2222,2227,2240,2254,2241,2260 (Toluidine red) 1325 pounds
DCC 1802 (Pyrazolone Orange) 525 pounds

Flammable, produces organic vapours

(3) The OSC directed START (Tetra Tech) to conduct a radiation survey around the Site. Available information indicates that potential radioactive material exists only in an unburned building. The OSC nonetheless directed the survey. The results indicate no readings above background.

(4) Lewis Environmental was awarded contract to stabilize the warehouse area. The OSC met with the contractors and surveyed the location. The OSC relayed the strategy previously discussed with PADEP and the owner. The chemicals are to be removed from the suspect structure and staged in appropriate location outside of the burned and collapsed warehouse. The contractor was encouraged to develop their own methods of actually implementing the strategy.

(5) The OSC informed the contractor to contact Durr Marketing Assoc. which had requested to be notified when their materials were going to be removed. The plan developed by Lewis indicated that Durr's materials would be the first to be removed since the most logical access area was at a location where Durr's materials were stored. The Durr representative requested to be present or the materials could not be moved. The OSC was requested by Lewis and the owner representative to become involved in the situation.

(6) The OSC discussed the urgency of the matter with Durr and the fact that they were notified within 60 minutes of determining that their materials would be among the first to be removed. The OSC estimated that the action would not start for a few hours since the contractor was still setting up the work zones. Durr was going to send their insurance agent to the Site. The OSC informed that the work would start with or without the agent present.

(7) The OSC toured the Durr insurance agent to the location of the MCC warehouse.

(8) Lewis Environmental initiated preparation activities for the stabilization effort at the MCC Warehouse this day. Lewis is supported by demolition operators from Schultz Demolition and Domino Salvage. The area was prepared by removing a PCB transformer and surrounding rubble to a nearby staging location (boiler house wall), demolishing a wall on J building and removing the rubble, and preparing a decontamination corridor.

(9) The staging area for the MCC stabilization operations is crossed by an overhead steel bridge. An asbestos wrapped pipe exists under the bridge. The bridge supports are compromised by adjacent building collapse and the bridge must be removed. The OSC and PADEP agreed that the pipe should be wrapped, then dropped, and moved to a secure area for abatement. PADEP informed that Air Quality (Stroble) must be informed of this operation, but approved its initiation.

(10) Lewis Environmental initiated stabilization efforts this day. Barium metaborate monohydrate was the first chemical to be removed.

(11) 15 5-gallon containers of phosphoric acid were removed from C building and placed into staging area.

(12) Water discharging from the area of pressurized vessels and containers under a fog spray since the night of 18 May began to turn green and exhibit an elevated pH. The contractor prepared to contain the water and PADEP would approve discharge after neutralization. The fog spray was instead discontinued. The source of the elevated pH and green coloration is unknown.

(13) The owner was requested to control Site security to ensure that safety of persons entering the Site to view remains of businesses are ensured. EPA will only be able to protect Site personnel if we are able to know who is here. The owner hired a security firm.

(14) The OSC was requested to attend a meeting at Borough Hall on Tuesday at 1930 hrs.

(15) The OSC and PADEP evaluated pooled water in the J building basement this day. The basement is holding a significant amount of water. The drainage system from the building basement appears to be clogged.

(16) Inspection of oil containment devices this day by USCG-AST indicates the need to remove oiled pads. The OSC advises that pads may no longer be necessary. The contractor should consider using containment boom, absorbent boom, and oil sweep.

20 MAY 01 - Sunday

SIGNIFICANT ISSUES

A significant amount of water is trapped within the basement of the J building. According to information from the owner's representative, the basement is usually drained from a 24" pipe which leads to the River. The pipe must now be clogged. The basement is nearly full of water (less than 2 feet below the beams which hold the roof of the basement) and debris. The water likely flows slowly to the River. The OSC directs that a sample be collected and subjected to hazardous categorization (hazcat) testing. These preliminary results will be used to determine the urgency of additional sampling and potential necessary removal of the pooled water. A sample of runoff water will also be collected and subject to similar hazcat testing. The hazcat results were each negative. The basement water level will be monitored. The OSC will await analytical results (due 21 May 01) for further decision making.

Fire cause investigation returned Site control of C building to Bridgeport Fire Chief.

Hot and smouldering areas remain within the complex. Fire and smouldering areas of J and C building are addressed. Remaining hot and smouldering areas remain only in the M building and primarily in the MCC Warehouse.

Based upon concern over the possibility of fire spread from the basement of the MCC area of M building to other areas of M building that were not destroyed by fire, the Bridgeport Fire Chief and USCG AST personnel conducted an entry into the western end of the basement to evaluate the potential for spread of fire. The entry team found that the possibility of fire spread to the western end of the basement was remote due to the presence of walls, the low amount of combustible material and the moisture level.

See POLREP 06 for additional information.

DAILY PLAN

- Evaluate J basement water
- Continue evaluation of Site drainage
- Rehabilitate oil containment devices
- Continue oil containment and recovery operations
- Continue MCC stabilization activities
- Remove ACM piping

EPA ACTIONS

- (1) 0800 Safety Meeting as well as 1000 and 1600 Command meetings were conducted.
- (2) START contractor (Tetra Tech) collects a sample of runoff water and J building basement water for hazardous categorization testing. The results do not indicate that the samples are particularly dangerous. The basement water level continues to remain high and will be monitored this day. The basement water may be analyzed pending receipt and review of runoff water analytical results collected previously from the canal.
- (3) Demolition operations this day included removal of high walls of M-135 building along Front Street. Removal of these suspect walls will enable the gas company to dig and then turn off the gas supply feeding the small gas fire along Front Street.
- (4) Based upon concern over the possibility that fire in the M building basement of the MCC area could spread to the basement of M buildings to the west, USCG-AST participated in an entry with the Bridgeport Fire Chief. The entry started in the western limits of the M building where the Chief determined that the possibility of fire from the eastern end was not likely. The entry continued through a collapsed area immediately west of the MCC Warehouse to determine if the source of the smoke in the MCC Warehouse could be determined. The entry found that the smoke in the western edge of MCC Warehouse originated from timbers and wood supporting the concrete floor. A grappler was used to pull a piece of flooring and enable water to extinguish this small area of fire. Other small areas remain.
- (5) The owner representative informed the OSC of the existence of a large amount of PVC piping in the basement area of the MCC Warehouse. Based upon the possibility that these pipes are part of the remaining smoldering area, the OSC determined that USCG-AST conduct additional air sampling for vinyl chloride. No concentrations were detected.
- (6) The USCG-AST was directed by the OSC to document possible environmental hazards throughout the complex as part of the OSCs overall evaluation of environmental conditions and concerns resulting from the fire.
- (7) Asbestos covered piping under a steel bridge spanning the staging area west of MCC Warehouse was wrapped. The pipe is to be removed to a separate staging area for future abatement. This activity was conducted by contractors for the owner.
- (8) The oil containment boom and associated absorbent materials were rehabilitated this day in anticipation of upcoming rain events. The oiled absorbent materials were removed.
- (9) Stabilization operations continued in the MCC Warehouse.

21 MAY 01 - Monday

SIGNIFICANT ISSUES

Initial results of the runoff liquid sample collected by EPA (START contractor) are verbally received this day and indicate increased concentrations of some inorganic and organic parameters. Most contaminants are in the low ug/L range and do not suggest the need for extraordinary measures to contain all Site runoff liquids at this time; especially since runoff pathways within the buildings remain unknown and storm waters from the Borough pass through the canal significantly increasing flow volumes. Petroleum hydrocarbons are the most elevated contaminant and many of the other organic parameters may be trapped in this oily layer. Partial results (some metals) also received from PADEP this day. The OSC and PADEP will continue to monitor J building basement water levels; which remain high, but appear to be dropping slowly. The OSC requests Lewis Environmental to sample the water. The OSC will continue efforts to stop drainage from the source areas.

No further fire suppression activities are anticipated by Bridgeport. The only smoke is from the MCC Warehouse area. Previous entry indicates that this smoke emanates from burning/smouldering timbers in the basement roofing. Additional areas of smoke may be chemical in nature, but the area cannot be safely accessed at this time.

The gas company turned off the gas feeding the flames along Front Street this day. This was made possible by the removal of the damaged high walls of M-135 building along Front Street.

MCC Warehouse stabilization operational period is between 0700 and 1900 until further notice.

See POLREP 07 for additional information.

DAILY PLAN

Develop plan for ensuring safety of business owners and insurance persons expected on Site during upcoming week
Evaluate ability to enter MCC Warehouse basement from eastern end to evaluate drainage
Notify PADEP of asbestos pipe
Evaluate runoff analytical data and determine need for containment actions (especially MCC area water)
Evaluate possible containment strategies
Evaluate need to address water in J basement

EPA ACTIONS

(1) Safety and Command meetings held this day at 0700, 1000, and 1600.

(2) The OSC requested USCG-AST to coordinate with owner representatives and take actions to ensure safety of persons anticipated to return to the Site during the upcoming week. Line of sight or escort is needed to ensure that business owners/insurance personnel are aware of evacuation procedures. Additionally, business personnel that intend to operate come Monday morning require briefing. The OSC requested that the owner assist in this matter. The OSC advised the owner that entry into the buildings would be his responsibility; the OSC advised against this allowance.

(3) The OSC received verbal analytical results of a runoff sample collected by Tetra Tech from the canal. The results indicate elevated concentrations of petroleum hydrocarbons and some inorganic elements. Low concentrations of a variety of organic compounds were also detected. The analytical results do not warrant extraordinary measures to control/contain all Site drainage. However, some elements/compounds exist at concentrations that pose a potential threat to human health and the environment. Contaminants include caprolactam, 2-butanone (MEK), acetone, tetrachloroethene, benzene, toluene, xylene, naphthalene, MIBK, aluminum, cadmium, lead, and zinc. It is reasonable to assume that many of the organic contaminants would reside in the oily layer and be removed by ongoing oily

material containment and recovery operations.

(4) Partial analytical results of PADEP sampling of May 16 and 17 were also received this day. The PADEP results indicate that lead is a contaminant in the runoff, but dissipates/dilutes in the River water to very low levels downstream of the Site.

(5) Based upon the potential contaminants in the runoff water, the OSC requests Lewis Environmental to sample the water pooled in the J basement. The water level appears to be slowly dropping at this time. The OSC was informed by building owner representative that the building has designed drainage to the River. This drainage (possibly a 24 inch pipe) must be unclogging.

(6) OSC and START contractor (Tetra Tech) develop and evaluate possible containment strategies for contaminated waters exiting the MCC area to the canal. Since the canal passes a large amount of storm water it will be impractical to contain flows during storms. Similarly it will be difficult to pump or re-route flows around the Site (Possible strategies are document in **APPENDIX 4**). The OSC determines that effort to contain discharges at their sources, effort to cover the exposed chemical areas, and effort to plug drainage ways in the MCC basement are the only reasonable and practical methods to limit contaminated discharges. Analytical data was considered in this decision.

(7) Air monitoring was not conducted this day due to rain.

(8) Due to precipitation, the Site's drainage patterns were evaluated and recommendations for inlet protection were passed to the environmental contractor (Lewis Environmental).

(9) Several burned and damaged automobiles were removed from the Site this day. The removal processes created an oily sheen over a large area of the Site roadways. The OSC informed the contractor that additional care should be taken.

(10) The OSC and USCG-AST entered building M-135 this day to inspect a small area of smoke and an observation of drums. The eastern end of the M-135 building is part of the MCC warehouse. Several smouldering timbers were found within the building, a cart of lime, and several empty drums.

(11) Additional boom was placed this day along an active outfall from the Site to the Schuylkill River. This will allow for the containment and collection of oily material closer to the Site. Prior to this time, oily material was allowed to move about 1000 feet down River before being addressed.

(12) Oily debris was removed from the canal.

(13) Stabilization operations continued in the MCC Warehouse. Chemical (titanium dioxide) was removed, additional walls were removed, and debris was cleared. The area of a significant amount of lead-containing pigments is upcoming.

(14) USCG-AST provided site safety for persons onsite today needing to view their former business location.

22 MAY 01 - Tuesday

SIGNIFICANT ISSUES

Evaluation of the surface drainage from MCC Warehouse area indicates that storm runoff from the western side of the MCC Warehouse enters the grates over the canal. Recent precipitation has enabled the OSC and START contractor to visibly identify surface migration pathways and inlets that require increased protection. The OSC recommends additional protection to minimize this drainage.

Observation of the MCC work area indicates that precipitation is mixing spilled materials and allowing these materials to drop through the flooring through designed and other drainage ways. Contaminated water drops through holes that formerly contained pipe, holes that contain/house grates or plates, and cracks in the floor resulting from the buildings collapse or time. Due to the current inability to stop drainage from the MCC Warehouse to the canal and the impractical nature of containing all canal water, the OSC finds that there are no other measures that can be immediately taken to stop drainage from migrating through the M building. Chemicals will continued to be covered and the drainage will continue to be investigated. The OSC also advised that the contractor make effort to keep pooled liquids away from drains and use vacuum truck to remove liquids before overflow.

A rain event caused the canal water level to rise very quickly as Borough water passed through. This verifies local knowledge. This also verifies the impractical nature of containing all runoff waters in the canal.

Federal Trustees were again notified this day due to the discovery of an oiled gosling. The bird was sent to Tri-State Bird Rescue.

See POLREP 08 for additional information.

DAILY PLAN

Continue investigation of Site surface and subsurface drainage.
Inspect Site after rain and make changes as needed to handle future storms
Rehabilitate booms from recent precipitation, recommend reduced use of pads
Evaluate entrance into MCC basement from the southeast area of building M
Sample J building basement water and determine need to contain

EPA ACTIONS

- (1) Safety and Command meetings were conducted this day 0700, 1000, and 1600
- (2) The OSC advised that the use of absorbent pads could be reduced. Pads could release during rain events as River flows overwhelm the boom. Containment boom, absorbent boom, and oil sweep are recommended.
- (3) Analytical results of runoff liquids collected by EPA (START) on 18 May are received onsite this day (**APPENDIX 5**). The results indicate increased concentrations of a variety of parameters as indicated in **TABLE 3**. The results indicate that certain inorganic parameters (aluminum, cadmium, lead, zinc) and organic parameters (MEK, acetone, MIBK, tetrachloroethene, naphthalene, benzene, toluene, xylene, and caprolactam) can be used to characterize the runoff. Additionally, the OSC finds that many of the organic contaminants will likely be in the oil layer where they may be removed. Some organic contaminants and inorganic contaminants would not likely be in the oil layer.

TABLE 3
EPA WATER QUALITY RESULTS OF CANAL DISCHARGE
18 May 2001

| PARAMETER | EPA results ug/L (canal) | Water Quality Criteria | Human Health Criteria | Removal Action Level |
|------------------------|--------------------------------|------------------------------|-----------------------------|----------------------------|
| Aluminum | 1170 | 750 | | |
| Barium | 151 | | 1000 | 2000 |
| Cadmium | 10.4 | 4.3 * | | 5 |
| Chromium | 16.8 | 570* | | 200 |
| Copper | 237 | 13* | | 1300 |
| Manganese | 372 | | 100 | |
| Nickel | 16.4 | 470* | | 500 |
| Lead | 34.1 | 65* | | |
| Selenium | 5.2 | 5 | | |
| Zinc | 2110 | 120* | 69,000 | 3000 |
| Mercury | 0.2 | 1.4 | 0.051 | 10 |
| Phenol | 1.65 | | | 6000 |
| Benzyl Alcohol | 4.07 | | | |
| Napthalene | 7.69 | | | 100 |
| 2-methylnapthalene | 2.48 | | | |
| PAH compounds | ≤ 15 | | | |
| Benzo(a)pyrene | | | | 0.2 |
| caprolactam | 75.6 | | | |
| 8 unknown compounds | ≤ 300 | | | |
| Acetone | 307 | | | 3500 |
| 2-butanone (MEK) | 297 | | | 21,000 |
| Benzene | 1.24 | | 71 | 100 |
| Toluene | 6.79 | | 200,000 | 2000 |
| Xylene | 1.65 | | | 40,000 |
| 4-methyl-2-pentanone | 36.5 | | | |
| Methylene chloride | 1.37 | | 1600 | 500 |
| Tetrachloroethene | 2.8 | | 8.85 | 70 |
| Petroleum Hydrocarbons | 42,200 mg/L | | | |

TABLE NOTES

Note 1: Parameters not reported in this Table are either not detected, not particularly toxic, or detected in blank sample.
Note 2: All results and criteria reported in ug/L except where noted.

Note 3: Water Quality Criteria are highest concentrations to which an aquatic organism can be briefly exposed without unacceptable effect. The values are not specific to the Schuylkill River and are based upon dissolved metal concentrations while EPA results are reported in total metal concentrations.

Note 4: Human Health Criteria represent values protective of human ingesting exposed organisms

Note 5: Removal Action Level is Superfund level for initiating emergency protection of drinking water

Note 6: (*) denotes actual value dependent upon hardness of River

(4) The OSC requested that additional protection be placed around a grate inlet that allows liquids to migrate from the MCC Warehouse area west towards a grate that directly enters the large pipes that contain the canal in this area. A berm was built up around the grate area and the pooled water is periodically pumped. The contractor will install a berm in the work zone to minimize liquid migration to the canal grate. Liquids pooled in the MCC work zone drain to unknown locations primarily in the basement of the MCC Warehouse building.

(5) One of the booms was repositioned as it was lost in the rain event.

(6) Lewis Environmental collected a sample of water pooled within the basement of the J building. The sample will be analyzed for a variety of inorganic and organic parameters.

(7) An oiled gosling was found in the boom this morning. The bird was placed in a box and transported to Tri-State Bird Rescue by Lewis Environmental for rehabilitation. The OSC notified the Federal Trustees. The OSC also spoke with Tri-State representative regarding possible contaminants in the oil. The OSC advised that the bird be handled as a bird with heavy oil contamination. USFWS (Roberts) requested updates on future wildlife issues and indicated that he'll be onsite before the end of the week.

(8) The OSC requested that the River bank area be surveyed and that areas of oily debris and bird nesting be identified. Oily debris near bird nesting areas was to be removed. The START contractor and owner representative surveyed the bank.

(9) PADEP was notified of asbestos pipe operation.

(10) The results of River sampling and water intake sampling conducted by the Philadelphia Water Department were received onsite this day (**APPENDIX 6**). The samples were collected 16 and 17 May. The results indicate that monitored parameters thought to be linked to the Site were not detected in the water intake. The results indicate that low ppb-range concentrations of naphthalene, nitrobenzene, toluene, xylene, MIBK, tetrahydrofuran, carbon disulfide, and 1,1-dichloro-2-propanone were detected in the River near the I-476 bridge. Methyl-t-butyl ether, a gasoline additive, was identified in all samples. Contaminants are not found at levels that would require extraordinary measures to contain current release or require treatment. The list of parameters analyzed by EPA and the Philadelphia Water Department are not the same.

(11) Air monitoring was conducted for only a portion of this day due to rainy weather and high moisture. This day samples for Sulfur dioxide analysis were collected (based upon potential decomposition products of some Durr materials in the warehouse and the possibility that some of these materials are still hot or smoldering) to try and pinpoint an odor that continues to emanate from the Warehouse area. The odor has a sulphur smell. Sulfur dioxide readings were between approximately 5 and 7 ppm. The OSHA PEL is 5 ppm. The levels in downwind areas are less than 5 ppm. The OSC determines that the concentrations do not warrant additional activity to locate their point of origin in the collapsed and burned and contaminated structure.

(12) The OSC requested that security fencing be placed in the southeast area of the MCC Warehouse to keep public back away from the operational area. The southeast corner of the MCC Warehouse is close to the Site entrance and security check point.

(13) Most of the operations in the MCC Warehouse this day focused on the removal of a significant quantity of lead and lead chromate containing pigments.

(14) The electric company was onsite this day to repair electric lines behind C building. Poles supporting the line were severely compromised during the fire. The sewer authority was also onsite to ensure that electric poles would not be placed near force main under the Site.

(15) A vacuum truck was used to remove oily liquids pooled in the former footprint of the George's Auto Supply locations in C and M buildings.

(16) Demolition operators worked with the OSC to open a potential entrance area into the southeastern wall of the MCC Warehouse. The parking area collapsed near an area which appears to be a pipe chase; the OSC could see a door in the distance of the collapsed area. The owner representative indicated that a stairwell existed in the area and that one could formerly enter the basement from this location. According to the owner representative, the basement area around the stairwell contained numerous tanks (formerly for soaking fibre) and was demolished and backfilled in the past. Demolition operators removed part of the parking surface and opened an entrance into a small room. The OSC entered this underground area and found a significant pool of orange colored oily liquid, a hallway, and another possible door in the distance. The area of smoldering remains could not be seen nor could the OSC determine how this area drained. It appeared that liquid was moving west along the corridor floor. The entry was completed at the end of the work day.

(17) The OSC met with EPA CIC and attended a Council meeting at Borough Hall this evening. The OSC briefed the attendees on environmental, safety, and health issues.

23 MAY 01 - Wednesday

SIGNIFICANT ISSUES

The OSC and PADEP developed a strategy for overall Site environmental actions this day. The Site debris needs to be segregated into appropriate waste streams (e.g., RCRA, residual waste, Construction/demolition debris, Asbestos-containing materials, PCB-contaminated materials). As demolition operations progress, the environmental contractors need to be able to identify these areas through review of available facility information, inspection of debris areas, and sampling as necessary. Potentially hazardous materials need to be removed from the debris. The Site drainage must also be contained. The OSC advised that EPA is actively trying to stop ongoing releases by investigating drainage in the MCC area. The longer term Site operations cannot continue to allow such releases. As such, the contractor must be able to develop an overall Site runoff containment plan. PADEP and the OSC met with the Site owner to request that the owner prepare a work plan to govern and guide these future Site activities. PADEP agreed to take the lead on oversight of longer term operations pursuant to the work plan. The OSC agreed to participate in review.

US Fish and Wildlife Service (Roberts) expected on Site this day.

See POLREP 09 for additional information.

DAILY PLAN

Identify/review available environmental files pertaining to business complex
Review ongoing documentation by EPA, USCG-AST, and START and consolidate where appropriate.
USFWS expected onsite this day.
Forward expected cleanup strategy for remainder of Site to owner
Review Bruggemann Chemical inventory MSDS

EPA ACTIONS

- (1) 0700, 1000, and 1600 safety and command meetings held this day
- (2) The OSC, USCG-AST, and START met to ensure that ongoing record keeping efforts were coordinated. Available records include START logbook. AST log book and documentation of environmental assessment, PADEP log, POLREPs, and OSC record. START provides OSC a list of bullet items for POLREP and OSC record.
- (3) Inspection of the newly bermed area between MCC Warehouse and a grate leading to the canal indicates that runoff water is effectively contained. However, vacuum truck operations will need to periodically be conducted to prevent overflow. The contractor should rely upon berms constructed at the perimeter of the operational areas of MCC..
- (4) The water in the J building basement continues to remain high, but is now obviously draining to the River. PADEP to evaluate need to prevent drainage, release drainage slowly, or ignore drainage. The decision will be made based upon consultation with water quality personnel and consideration of available analytical data. Data specific to the basement is expected later today or tomorrow.
- (5) The OSC and PADEP requested a meeting with the owner to discuss implementation of longer term cleanup operations at the Site.
- (6) US Fish and Wildlife Service onsite to inspect River bank area and identification of areas of concern. OSC and USFWS survey River bank. Advised to continue to report oiled wildlife. Beyond ongoing efforts to minimize oily debris in identified nest areas, no other effort to reduce potential impacts were directed.
- (7) Demolition operators assisted OSC to investigate possibility of opening an accessway to the MCC Warehouse from the northern wall. Several areas of the floor have visibly designed access to the basement or other below grade areas through plates or other holes. An area of the floor was opened, but the area appeared to be in a corridor immediately north of the basement now exhibiting smoke and in which drainage to the canal is anticipated. The OSC is unable to determine if this corridor is one which drains Site contaminants to the canal. Monitoring of the air space below the floor exhibits extreme levels of carbon monoxide. The hole could not be opened further south due to ongoing operations.
- (8) A water main along Front Street broke this day. The main is part of the service that feeds the business complex. Dust suppression efforts were hindered during this period. The hose line into the operational area was re-routed to another hydrant along Front Street.
- (9) PADEP and OSC met with the Site owner and environmental and insurance representatives. The purpose of the meeting was to direct the owner to develop a work plan pursuant to which future demolition and cleanup operations would be governed. The work plan should identify how the Site drainage will be controlled, how debris will be segregated to avoid mixing hazards, and how Site safety will be addressed. The debris should be organized pursuant to appropriate disposal (e.g., hazardous waste, residual waste, PCB, ACM, C&D debris). The OSC has agreed to provide the owner with all available developed information. PADEP has agreed to take the lead on work plan approval. The OSC will review the work plan product.

(10) The OSC informed the owner that EPA will remain onsite through the efforts to stabilize the MCC Warehouse. Additionally, the USCG-AST will remain onsite until the owner demonstrates that he is able to take over Site safety.

(11) The OSC met with newspaper reporter this day (Times Herald).

(12) The OSC met with Montgomery County Emergency Services this day regarding the potential for local government reimbursement for efforts to (a) control release of oily material from George's Auto Supply and (b) control release of chemical from MCC Warehouse. County informed of need to seek reimbursement from owner and insurance first. OSC will investigate if efforts to control/prevent oil release may be suited to a claim under OPA.

(13) Upcoming operational areas include areas where Bruggemann inventory is located. A review of inventory and MSDS information results in the following. MSDS are available on Site for all inventory chemicals. The information below is a summary. The information is not a complete list, but represents materials with higher amounts on site and chemicals of particular interest from a runoff or air monitoring perspective.

Bruggemann Chemical US

TABLE 4

GENERAL CHEMICALS/ELEMENTS

GENERAL DECOMPOSITION PRODUCTS

Caprolactam
Caprolactam sodium salt
caprolactam hexanediisocyanate prepolymer
hexamethylene -1,6 - diisocyanate
Polyamide
Amorphous alumina silicate
methanesulfinic acid, hydroxy sodium salt
sodium carbonate
zinc oxide
zinc carbonate
zinc hydroxide
N,n-diphenyl - 1,4 - phenylenediamine
Quinoline based polymer
Phosphoric acid, salt
potassium bromide
potassium halogenide
cuprous iodide
phosphite derivative
Aliphatic polyisocyanate
1-methyl -2- pyrrolidine
sodium sulfite
Phosphonic acid
carboxylic acid derivative
hexanedioic acid
bis(2-ethylhexyl)ester
hydroxy-methanesulfinic acid
formaldehyde
lead oxide

Hydrogen Cyanide
Carbon Monoxide
Carbon Dioxide
Oxides of Nitrogen
Ethylenediamine
Oxalic acid
Oxides of Sulfur
Oxides of zinc
Oxides of Phosphorus
Oxides of copper
Iodine
Hydrogen Iodide
Cyanides
Phosphines
Oxides of lead

SPECIFIC BRUGGEMANN CHEMICALS OF POTENTIAL CONCERN

| | |
|---|--|
| M-C10P (49,170 pounds in plastic drums) caprolactam caprolactam sodium salt | Corrosive, irritant, soluble solid Decomposition to CO, carbon dioxide, Oxides of nitrogen, and HCN |
| M-C20P (34,034 pounds in plastic drums) caprolactam caprolactam hexanediisocyanate-prepolymer hexamethylene- 1,6-diisocyanate (HDI) | Irritant, respiratory sensitizer, fine white partially soluble powder. Decomposition to CO, carbon dioxide, oxides of N, HCN |
| E-01 (120,000 pounds in fiber drums) methanesulfinic acid, hydroxy-,sodium salt sodium carbonate formaldehyde (residual) | White soluble powder (pH=10). Decomposition to CO, carbon dioxide, oxides of sulfur |
| H-321 (23,320 pounds in plastic drums) potassium bromide potassium halogenide cuprous iodide | White, partially soluble powder, possible CNS effects Decomposition to CO, carbon dioxide, oxides of Cu, Iodide, hydrogen iodide |

24 MAY 01 - Thursday

SIGNIFICANT ISSUES

Two additional oiled goslings were found today and transported to Tri-State Bird Rescue. The federal trustees were notified.

The contractor was requested to develop a strategy for securing the Site for a reduced operations period during the upcoming holiday. The OSC requested that the contractor be prepared to ensure that oily material from boom is removed, drainage inlets are protected, material is covered where possible, and Site is generally secured against precipitation expected during the holiday period. The OSC advised that EPA would take additional actions to enter the basement and identify and plug drains that may enable liquid to exit from the MCC Warehouse area.

See POLREP 10 for additional information

DAILY PLAN

Evaluate safest entry point for Level B entry to MCC basement to search for and plug, if possible, drains
Determine need to contain J basement water
Discuss transition of Site Safety to owner
Develop strategy for securing Site for holiday period

EPA ACTIONS

- (1) 0700, 1000, and 1600 safety and command meetings held this day.
- (2) analytical results of J building basement water collected by Lewis available this day. The analytical results indicate increased concentrations of antimony (153 ug/L), cadmium (12 ug/L), copper (540 ug/L), lead (620 ug/L), zinc (3000 ug/L) 2-butanone (MEK)(55 ug/L), and acetone (140 ug/L). The analytical results are contained in **APPENDIX 6**. These contaminants can be traced to Site chemicals although it is possible that other structurally based products (e.g., lead paint) could contribute to some of the concentrations. However, the basement nearly completely drained during the night as a clog must have worked loose. At this time it is not necessary to contain remaining small amount of water. PADEP and OSC concur on this course of action.
- (3) Air monitoring activities continue to identify sulfur dioxide as the only compound of concern in the emission from MCC Warehouse.
- (4) The owner has agreed to prepare a work plan for longer-term environmental operations. There is no expected delivery date.
- (5) The owner was requested to provide for Site Safety similar to that currently provide by USCG-AST. The owner representative requested the OSC maintain this role through Tuesday of next week when a re-evaluation of capability will occur.
- (6) The contractor (Lewis) began to solidify the lead-containing pigments that released to the floor with kiln dust. The mixture was then transported to storage containers.
- (7) Demolition contractors continued support of MCC stabilization efforts by removing structural hazards.
- (8) Based upon the continual discharge of oily material into drainage which enters the canal and the River, the owner initiated cleanup operations in the auto supply locations of M and C buildings. Beginning this day, oily debris in the M building (M 101) was removed to storage containers. Oily liquids were pumped into a tank on the Site.
- (9) Damaged poly drums in the MCC Warehouse (Bruggemann area) were removed to the staging area.
- (10) High visibility fencing was installed along the Front Street side of the MCC Warehouse for improved designation of warm zone areas.
- (11) Gas company on site to test lines. Pressurized air escaped from an uncapped line near the MCC work zone. All personnel evacuated the area until the source of the event was determined. START and USCG conducted air monitoring. The event shows the importance of overall Site safety coordination.
- (12) Additional analytical results of PADEP sampling completed 16 and 17 May were received on site. The results indicate that several compounds were elevated in the fire runoff including lead, naphthalene, acetone, 2-butanone (MEK), benzene, MIBK, toluene, xylene, tetrachloroethene, carbon disulfide, bromomethane, methylene chloride, and styrene. In general, the EPA and PADEP results indicate similar contaminants in the runoff. The EPA results are an order of magnitude less than PADEP results (possibly due to decreased runoff as fire-fighting efforts decreased). The list of EPA and PADEP analytical parameters are not similar. The analytical results are contained in **APPENDIX 7**. Additionally, the results are contained in **TABLE 5** comparing results to EPA data. PADEP found the pH of the canal water to be 10.4.

TABLE 5
PADEP WATER QUALITY RESULTS
18 May 2001

| PARAMETER | PADEP results ug/L (canal) 5-16-01 | EPA results ug/L (canal) 5-18-01 | Schuylkill River upstream | Schuylkill River at canal | Schuylkill River downstream |
|------------------------|---|---|---------------------------------|---------------------------------|-----------------------------------|
| Lead | 318 | 34.1 | - | 52 | 1.3 |
| Zinc | | 2110 | | | 24 |
| Phenol | | 1.65 | 6.4 | 120 | 12.1 |
| Benzyl Alcohol | NA | 4.07 | NA | NA | NA |
| Napthalene | 116 | 7.69 | - | 33.4 | - |
| 2-methylnapthalene | NA | 2.48 | NA | NA | NA |
| PAH compounds | NA | ≤ 15 | NA | NA | NA |
| Benzo(a)pyrene | NA | 1.03 | NA | NA | NA |
| caprolactam | NA | 75.6 | NA | NA | NA |
| 8 unknown compounds | NA | ≤ 300 | NA | NA | NA |
| Acetone | 1720 | 307 | 18.3 | 629 | 27 |
| 2-butanone (MEK) | 5360 | 297 | - | 151 | 1.2 |
| Benzene | 39.7 | 1.24 | - | 3.9 | - |
| Toluene | 95.6 | 6.79 | - | 15.3 | - |
| Xylene | 48 | 1.65 | - | 10 | - |
| 4-methyl-2-pentanone | 978 | 36.5 | - | 30.6 | - |
| Methylene chloride | 17.3 | 1.37 | - | - | 2 |
| Tetrachloroethene | 16.6 | 2.8 | - | 6.2 | - |
| styrene | 13.2 | - | - | 4.5 | - |
| 1,2,4-trimethylbenzene | 6.6 | NA | - | 2.8 | - |
| bromomethane | 72.2 | - | - | - | - |
| carbon disulfide | 97.6 | - | - | 0.81 | - |
| Petroleum Hydrocarbons | NA | 42,200 mg/L | NA | NA | NA |

Note: NA=not analyzed, (-) = no value,
Note: Rive samples collected 17 May 01

25 MAY 01 - Friday

SIGNIFICANT ISSUES

The basement area of the M building complex is draining contaminated liquids into the canal from the MCC warehousing and George's Auto Supply areas through unknown pathways. Available information from the complex staff and an old print of the former Continental Diamond Fibre Company layout indicate that a basement exists under the subject area, but that it is partially filled, and its exact layout or drainage features are unknown. Business complex personnel indicate that they have seen piping along the floor of the basement. Effort to identify and plug this piping will minimize movement of contaminated liquids into the canal. Entry into the basement will be made this day to identify drains and plug these drains if possible.

Site operations will be minimized this upcoming holiday period. A significant part of today's operations resulted in placing covers over exposed contaminated areas and ensuring that identified drainage ways were secured.

EPA (USCG-AST) identified some drains in the basement and was able to plug (wooden plugs) two of these drains. This effort will provide for temporary stabilization and enable personnel to break from ongoing significant efforts for the upcoming holiday.

The contractor removed the majority of the pads from the River. This action will ensure that anticipated rain events will not result in the migration of oily pads down the River.

A plan was developed to call contractor, EPA, PADEP, and Montgomery County personnel in the event of the occurrence of events that must be immediately addressed or evaluated. Environmental contractor and EPA contractor will make daily inspections of Site during the upcoming three day holiday period.

See POLREP 11 for additional information.

DAILY PLAN

Secure Site operational areas for upcoming holiday period and expected rain
Enter warehouse basement to evaluate installation of stop-gap measures to prevent releases
Install stop-gap measures in MCC basement
Request owner to identify Safety monitor
Develop plan and call list for upcoming holiday period

EPA ACTIONS

- (1) Safety meeting (0700) and UC meetings (1000 and 1600) conducted this day.
- (2) OSC and PADEP informed owner that J basement water need not be removed. The vast majority of the water drained over the past 24- 36 hour period.
- (3) OSC requested USCG-AST to review contractors safety plan and evaluate whether the plan will cover overall site safety (i.e., safety of personnel not working in or immediately adjacent to the MCC or oil recovery work zones). At this time, the EPA Safety Plan is the plan for protecting all persons that are on Site including contractors, business persons, utility workers, etc., that are onsite and not involved in the stabilization or oil recovery operations. The OSC requested the owner to begin assumption of these responsibilities.
- (4) The owner environmental representative continued to request EPA continue safety functions through Tuesday.

(5) OSC and START investigate possibility of caprolactam as an air contaminant. Caprolactam is not volatile and would be expected as a particulate only. Particulate levels in air remain low.

(6) The owner ensured that security would exist at the Site throughout the upcoming weekend.

(7) USCG AST mobilized additional personnel to the Site to perform an entry into the basement area of MCC warehousing, inc. located beneath the current operational area and believed to contain at least some drainage pathways into the canal. The level "B" entry was made after operations in MCC Warehouse ceased for the day and securing operations were initiated. The entry team found that a significant amount of liquids and solid material from the first (grade level) floor of the warehouse has fallen through to the basement through designed spaces (e.g., grates and drainage ways) and spaces resulting from the collapse of the structure (e.g., cracks). The contaminated materials have entered open top tanks located in the basement as well as spilled upon the floor. The amount of the liquid and solid material is unknown. The integrity of the tanks and piping integrity is unknown. Liquids on the floor are able to migrate from the evaluated basement area through pipes and other spaces located at the base of the northern wall. The entry team was able to place wooden plugs into 2 of the pipes. Another area was draining water to a deeper pit (e.g., sump), but the outlet of this sump could not be investigated due to deep liquid levels. The entry team was unable to find safe entry into other basement areas of the MCC warehouse area. Based upon information derived from the entry team, the OSC determines that the effort has reduced, but likely not eliminated liquid migration into the canal. Further investigation will be needed. The owner will be informed of this information on Tuesday.

(8) The Environmental contractor secured the Site against precipitation expected during the upcoming holiday period. Oily debris from the M building (M101) was covered and the oily floor in this area was bermed and covered. The floor contains a manhole that enters the canal according to the owner.

(9) Based upon the covering of exposed oily and chemical materials, readiness of booms and absorbent material, and placement of plugs in identifiable MCC basement drains, the OSC determined that the Site operations could be minimized to maintenance and response status during the upcoming weekend. The installed stop-gap measures will provide temporary stabilization of chemicals and oily release. The Site will be monitored and the booms tended by Lewis Environmental contractors. The Site will be monitored and the air sampled by START contractor (Tetra Tech). The owner's environmental representative, the OSC, and Montgomery County Emergency Services will be contacted in the event of any changing situation at the Site. The OSC will notify PADEP. The owner is providing Site security.

(10) The Site was placed in temporary stabilized status as of 1800 hrs. 25 May 01.

26 MAY 2001

SIGNIFICANT ISSUES

The OSC was notified by the owner representative of discharging discolored water from MCC Warehouse area after significant rain events this overnight period. The environmental contractors took actions to improve berms isolating water in the work zones. The OSC advised that if this action does not work, tanks should be brought to the Site to contain this water. Since the contractor does not want to mix chemical and oily discharge and the only available onsite vacuum truck contained oily material, the OSC advised that the contractor bring pumps to the Site. In the event of an emergency discharge, the OSC advised the pumping of waters to the MCC basement. The owner representative returned call to the OSC and advised that the berms were improved.

The OSC was notified by Montgomery County Emergency Services that increased smoke was evident from the MCC Warehouse area during the afternoon. The OSC called the owner and advised to have demolition contractors on standby and the OSC was to meet with Montgomery County at approximately 1730 at the MCC Warehouse. The OSC notified PADEP. The OSC found that increased smoke was indeed evident and that the smoke was not attributable to heavy weather and rain keeping the smoke close to the ground. Closer inspection revealed that the smoke was emanating from a pile of debris that appeared to be on the floor of the warehouse. The OSC determined that the smoke needed to be addressed since it represented a new condition that could threaten increased fire in the chemical storage area and increased emission to the community. Rain prevented useful air monitoring, but sulfur dioxide was identified downwind in the rainy weather.

The demolition operator used heavy equipment to remove debris and gain access to the smoking area. The OSC found that red and orange powders were smoking and that open flame appeared when the debris was moved. The OSC requested that START contractor review available MSDS. MSDS indicated that some of the pigments expected in that area were flammable and emit sulfur dioxide in combustion. The OSC and Montgomery County Emergency Services set up a hose line to the smoking area. The OSC directed that the operator remove debris from smoking area and expose smoldering chemical. The chemical flared. Water dispersed the red powder, but did not extinguish flame. After applying water to cool the area and after exposing the chemical to the water for about 60 minutes, the fire was deemed to be out. Additional hot spots were noted in the nearby areas, but they were not actively smoldering and emitting increased smoke like the area addressed this night. OSC, START, and Montgomery County demobilized at about 2100 hrs. Ongoing rain was expected to further decrease temperature and wet the area of smoldering chemical inaccessible at this time.

27 May 01 - Sunday

28 May 01 - Monday

Monitoring and maintenance operations were conducted these days. START contractor conducted air monitoring and found no readings above background concentrations. Smoke from MCC Warehouse is noticeably diminished. Significant rain events have overwhelmed the booms. One boom was dislodged by a telephone pole-sized log in the high water of the Schuylkill River. Environmental contractors ensure integrity of berms installed to protect inlets on the Site.

Upcoming operations are expected to be conducted in the remaining area of the MCC Warehousing throughout the upcoming week. Clients with chemicals stored in the remaining area include Pentachem and Energy Tech. The total volume of Energy Tech material is expected to be small based upon early conversation with the owner. A summary of MSDS information relating to Pentachem follows. The summary does not include information about all chemicals expected in the Pentachem inventory.

TABLE 6

Pentachem

Pigments contain a large variety of metals

GENERAL CHEMICALS AND ELEMENTS

Alkyd resin
mineral spirits
xylene
ethyl benzene
toluene
surfactant
pigments
nickel
antimony
aluminum monohydrogen phosphate
bis(3-aminopropyl)ethylenediamine
ferric oxide
isopropanol
octadecylamine-octadecylguanidine
cerium oxide
bismuth molybdate
bismuth vanadate
molybdenum
antimony
cadmium

polyoxyethanol
ethylene glycol
barium salt
barium sulfate
barium
petroleum hydrocarbon resin
petroleum distillates
chromium VI
copper
zirconium oxide
neodecanoic acid
manganese
titanium dioxide
formaldehyde
diethanolamine
ammonium formate
melamine-formaldehyde copolymer
diisopropyl-naphthalene
2-naphthalenol

GENERAL DECOMPOSITION PRODUCTS

carbon monoxide
carbon dioxide
ammonia
hydrogen cyanide
chlorides
toxic gases
formaldehyde
oxides of nitrogen
colored monazo dyes
3,3 - dichlorobenzidine

29 May - Tuesday

SIGNIFICANT ISSUES

The owner of the business park continues to conduct stabilization activities in the MCC Warehousing and adjacent George Auto Supply locations of M building. The chemicals and heavily oiled debris are removed from the burned and collapsed structure and placed into roll-off containers. Available inventory and MSDS allow segregation where possible, but many of the chemicals are mixed due to building collapse, burned containers, fire-fighting efforts, and significant precipitation events. The chemical warehouse is located over an area of the former fibre manufacturing facility that was constructed with a basement in which dozens of tanks, associated piping, and designed drainageways are/were located. The basement area drains through unknown pathways to the canal. EPA has been able to identify and plug at least two of these possible drainageways, but additional areas are expected based upon ongoing efforts to identify drains. At this time, the Site still allows potentially contaminated water to run uncontrolled into the canal or other unknown locations.

An entry into the basement at the end of this day by OSC, USCG-AST and START contractor identified additional drainage pathway from basement area to unknown locations; probably canal. The location is near the northwest corner of the warehouse footprint. Water is visible running along an east-west trending corridor along the northern edge of the area of tanks. The source of some of the water is a broken water pipe that cannot be safely accessed at this time, but water also originates from rain events and dust suppression activities. Sampling of this water and possible effort to block this significant drain will be evaluated tomorrow.

See POLREP 13 for additional information

DAILY PLAN

Reposition/redeploy booms compromised by weekend rain
Continue evaluation of basement drainage in chemical warehouse area.
Evaluate/transfer Site Safety role to owner
Continue/complete environmental assessment of overall Site

EPA ACTIONS

- (1) Safety meeting conducted at 0700. Command meeting conducted at 1600.
- (2) OSC and START (Tetra Tech) review air monitoring data and modify future air monitoring to include only organic vapor and particulate monitoring. Additional monitoring will be conducted on an as-needed basis. Today's air monitoring did not identify elevated levels of contaminants.
- (3) USCG-AST and OSC advise Lewis Environmental that Level C respiratory protection should include combination cartridges for chemical protection in addition to dust protection. This recommendation is based on the possibility of unknown chemicals or chemical mixtures to contain organic materials that could penetrate the dust cartridges currently in use.
- (4) PADEP discussed boom strategy with OSC. OSC and PADEP agree that three areas of booming are necessary. PADEP continues to take the lead on boom strategy.
- (5) OSC and PADEP discuss strategy for addressing containment and/or cleanup of basement. The basement can be addressed as part of the emergency stabilization or as a longer-term cleanup effort. OSC and PADEP agree that this decision hinges on the success of identifying and evaluating the drainage from the basement. This drainage is currently

not fully understood, but is known to enter the canal through unknown pathways (2 pipes currently plugged by AST).

(6) OSC directed START (Tetra Tech) to collect samples of canal discharge (near facility and in River) and a sample of water collected in a masonry tank beneath the operations area of the warehouse. Analytical results will characterize current discharge quality, quality at exit to River, and assist in determining urgency of completely blocking basement drainage.

(7) OSC and USCG-AST discuss transfer of Site Safety to Site owner. OSC is prepared to transfer Site safety to owner representative - Alpha Environmental - when owner can assure that Site Safety plan addresses personnel other than environmental contractors onsite (Lewis Environmental work plan) and Site Safety plan includes air monitoring for organic vapors and particulates.

(8) Tri-State Bird Rescue contacted OSC this day to inform that the 3 oiled goslings are fine. Requested contact with owner to discuss reimbursement and release of birds.

(9) OSC Towle and OSC Kelly completed environmental assessment of C buildings this day. This effort built upon effort begun by USCG-AST and START previously. Assessment of J and H and M buildings continues.

(10) OSC, USCG-AST, and START entered the warehouse basement from the west end this evening to identify drainage pathways. The basement contains numerous masonry tanks with old valves and piping. Mixers, pumps, and other machinery are present. Gutters pass between some tanks to drain liquids. Water was observed migrating from somewhere beneath the operational area of the warehouse, entering a sump along the northwestern corner of the area suspected to have a full basement (near loading ramp), and exiting a pipe destined for unknown locations (canal?). This exit will be assessed tomorrow. The air space in the basement exhibited approximately 25 ppm organic vapor on PID and FID.

30 May 01 - Wednesday

SIGNIFICANT ISSUES

Oily runoff (mainly sheening with small discharges) continues to enter the canal through unknown pathways believed to be drainage ways serving the industrial facility formerly operating at this location. Discussions with PADEP have resulted in decisions to re-configure boom to better match ongoing discharge of sheen and "burps" of oil. The linear feet of boom was reduced and the amount of pads have been reduced.

Available inventory and MSDS allow segregation of chemicals removed from the MCC Warehouse where possible, but many of the chemicals are mixed due to building collapse, burned containers, fire-fighting efforts, and significant precipitation events.

The chemical warehouse is located over an area of the former fibre manufacturing facility that was constructed with a basement in which dozens of tanks, associated piping, and designed drainageways are/were located. The basement area drains through unknown pathways to the canal and potentially to other unknown locations.

Efforts by OSC and USCG-AST to identify drains in the basement have revealed that the accessible full basement area is a east-west trending corridor with at least five rectangular tanks along the south wall, pipe drainageways along the

north wall and floor, and several sumps/pits with unknown exit points. The USCG-AST prepared a sketch map of the basement corridor based upon several entries. The sketch map will be updated as additional information regarding drains and plugs is generated. The floor contains a large amount of chemical that has dropped through from the first floor (solid and liquid). Liquid exists in at least 3 tanks. The condition of the tanks and valves is unknown, but liquid is currently being held within (although tanks are weeping through cracks). The condition of the area behind the south wall is unknown; an old print indicates that area contained "fibre tanks" and the owner has indicated that much of it was "backfilled" when the warehouse area was improved. The western edge of the basement area under the warehouse is accessible and it contains tanks, piping, gutter drains, sumps, and machinery. EPA will continue effort to determine if liquid in the footprint of the chemical warehouse can be contained/isolated from the canal and River.

EPA has been able to identify and plug at least two possible drainageways in the MCC Warehousing basement area, but additional drains found 29 and 30 May are not yet addressed as they exist in sump areas that contain sludge material. USCG-AST entries have resulted in a sketch map that identifies known and potential drains from the basement area. The owner informs and OSC has observed that much of the basement area south of the mapped area and the majority of the warehouse footprint was backfilled in the past. It is unknown if drains were removed or plugged or if chemical has dropped into these areas (the OSC has observed chemical entering the backfilled basement area at two locations thus far, most of the area is still covered by burned rubble and chemicals). The floor of the intact basement area contains trench gutters designed to convey liquids to sump areas with unknown exit locations.

At this time, the Site still allows potentially contaminated water to run uncontrolled into the canal or other unknown locations.

See POLREP 14 for additional information.

DAILY PLAN

Further evaluate basement drainage from MCC Warehousing area
Propose modifications to booming strategy
Continue efforts to transfer Site Safety responsibility to owner

EPA ACTIONS

- (1) Operational period of the Site was reduced this day by owner. Work period is from 0800 to 1700. Safety and Command meetings conducted.
- (2) START contractor (Tetra Tech) continued air monitoring for organic and particulate. No elevated readings were identified.
- (3) OSC forwarded information to owner regarding need to contact Tri-State Bird Rescue regarding 3 goslings from Site. The 3 goslings are fine. Tri-State needs to talk with the owner regarding payment and release strategy.
- (4) Additional dike/berm (absorbent boom and debris) constructed along building C-111/C-101 area to prevent oily material in a former auto supply storage location from exiting the former building footprint during rain events. Oily material on the pad of the building overflows through rubble and flows west along the road into a drain which outlets to the River.
- (5) Lewis Environmental removed some boom and re-configured others to streamline oil collection and recovery areas. Lewis worked with PADEP regarding the deployment of boom. Lewis added additional boom further into River at owner request.
- (6) Water company onsite today to shut water service into MCC Warehousing building. USCG-AST and OSC, during

basement entry of 29 May, found that clean water was running through contaminated basement corridor and exiting through drain at northwest corner of chemical warehouse. The source of the water appeared to be a broken pipe along the south wall of the warehouse on the collapsed second floor. The water fell to the first floor and drained into the basement through holes in the floor. The water company successfully uncovered street valve and turned off water.

(7) OSC conducted preliminary environmental characterization of H building (old boiler house). The building is still intact but fire damaged. The building has numerous drums of unknown materials and asbestos. Demolition contractors also onsite to evaluate requirements for demolition.

(8) OSC forwarded initial assessment of buildings to owner. Additional information to be added and document finalized 31 May 01.

(9) Lewis Environmental continued to stabilize chemical warehouse area. Partially burned drums and containers were removed and overpacked or otherwise stabilized.

(10) OSC determined that M building basement area needs environmental cleanup. OSC will forward request to owner.

(11) OSC, START, USCG-AST, PADEP entered MCC Warehousing basement on the western end this day. The purpose of the visit was to collect a sample of water exiting a sump (drain box) located at the northwest corner of the MCC basement area (relatively clean water from a running water pipe on the second floor), conduct air monitoring, and inspect basement with PADEP. Air readings for carbon disulfide, formaldehyde, m-cresol, nitrous oxide, sulfur dioxide, carbon monoxide, and organic vapor. Low levels of organic vapor and sulfur dioxide were detected. All other parameters were not detected. Organic vapor readings from previous entry cannot be reconciled.

(12) START (Tetra Tech) collected sample of basement water discharge location at northwest corner. The water originated as clean water along the south wall. The water ran down a corridor and entered a sump (drain box) with a pipe at the base. The sample will provide characterization of water quality exiting the western portion of the basement.

(13) USCG-AST entered the warehouse basement from the northeast corner this evening to evaluate condition of previously plugged holes, existing pooled liquid, liquid levels in tanks, and gather information to again determine how liquid exits the basement area. The wooden plugs set on the 25th of May were in good condition, but the pooled water identified on Friday 25 May was gone. The liquid appears to have drained out through a "sump" area between two rectangular masonry tanks. This area was under a sizable pool of liquid on the 25th. Effort will be needed to determine how liquid drains through the sump. Additional sumps/pits were identified and sketched onto a figure; one passed liquid at the northwest corner. Air monitoring revealed low levels of organic compounds in the basement this day.

31 May 01 - Thursday

SIGNIFICANT ISSUES

Activities were initiated this day to remove liquids accumulated in the tanks identified by USCG-AST in the northern area of the basement of MCC Warehousing, inc. These tanks exist along the south wall of an east-west trending corridor in the basement level of the warehouse. An old print identifies the building area as consisting of fibre tanks.

Water formerly pooled in the corridor has gone. The EPA sample of water collected from a basement tank on 30 may can be used to evaluate quality of water in this situation. Since the only water now visible on the floor exists within a sump adjacent to two of the tanks, the OSC believes that the sump is a factor in the drainage of liquids from the basement area. Activities were initiated this day to remove the liquids, solids and debris from the sump to determine if an outlet can be identified. If an outlet can be identified, effort to plug this outlet will commence.

The OSC desires to transfer all Site Safety responsibilities to the Site owner at this time. Future work is going to occur under a work plan approved by PADEP. The current environmental contractor onsite has a qualified safety officer. The OSC has requested the owner prepare an overall Site Safety Plan and identify qualified persons to implement that plan. The purpose is to ensure that other persons working on the Site and the community remain protected from the environmental operations and hazards.

The OSC and USCG-AST finalized an overall assessment document of the complex. This document (**APPENDIX 9**) summarizes specific environmental or safety issues visible at specific building locations. This document should guide future demolition/dismantlement operations or work plan development. The document will be delivered to the owner.

See POLREP 15 for additional information.

DAILY PLAN

Evaluate ability to plug sumps in M building basement
Remove liquids from basement tanks
Complete Assessment document
Work to complete Site documentation
Prepare for EPA demobilization of emergency stabilization actions

EPA ACTIONS

(1) OSC and USCG-AST completed overall environmental assessment document. The document (**APPENDIX 9**) identifies environmental and safety hazards visible at specific building areas. Additionally, several recommendations for environmental actions are contained within.

(2) OSC and USCG evaluate obstacles for transfer of Site Safety responsibility to owner. OSC expects a plan to ensure protection of community and Site visitors. Lewis Environmental operations conducted under suitable Safety Plan.

(3) OSC requested a meeting with the owner 1 June 01 to conduct transfer of information and Site status, determine status of work plan for remaining Site cleanup activities, and deliver Site assessment document.

(4) OSC requested removal of liquids from tanks in the M building basement. This activity was initiated this day by Lewis Environmental.

(5) OSC requested removal of liquids and solids from sumps in the floor of the basement believed to convey water from the M building area. This activity was initiated this day by Lewis Environmental.

(6) PADEP advises on removal of certain boom and strategy for continued boom protection.

01 June 01 - Friday

SIGNIFICANT ISSUES

The drains and sumps identified in the east-west trending basement corridor have been sealed or plugged. Two pipes located in a sump between two masonry tanks are suspected as enabling the drainage of pooled water from the basement of the MCC Warehousing area. The locations of the drains, sumps, and plugs are identified on a sketch map prepared by USCG-AST (see **Appendix 1**). A sump between 2 tanks in the east-west trending corridor contained 2 pipes (a 6 inch pipe in the floor and a 4 inch pipe in the wall of the sump). Liquids drained from the sump and the surrounding floor area through at least one of these features. The holes were plugged by Lewis Environmental. A sump along the northwestern corner of the full basement area contained a 12 inch discharge pipe. The pipe was plugged. USCG-AST inspected and photographed these features and efforts. At this time, the OSC believes that all accessible drainage features have been addressed. Other features in the basement that may drain water have not yet been inundated based upon visual inspections.

OSC and PADEP met with Site owner this day. OSC and PADEP exchange information about Site cleanup goals, objectives, and directions. Owner informs that they are actively preparing a work plan, but little progress has been made. OSC informs of expectations about environmental cleanup and demolition with no environmental releases. The owner is informed of chemicals in the basement of the M building and the likelihood that these chemicals can only be removed with significant effort (involving demolition equipment not currently onsite). Although the drains are plugged that EPA has identified, all drainage is not understood at this time. Maintenance of the pooled liquids is necessary.

OSC informs owner of Site Safety requirements. OSC provides owner with a memo identifying EPA efforts to date. OSC also provides information from 29 CFR 1920.120. OSC expects an overall Site Safety Plan that ensures protection of community members. OSC transfers Site Safety liability and responsibility.

OSC determines that the emergency response phase of this incident is over. Since available drains are plugged, containment devices are installed, and contractors continue to work to mitigate the unsecured chemicals and oily materials, the OSC believes that the Site is stabilized. The OSC and PADEP expect that future work will be conducted under a work plan.

See POLREP 16 for additional information.

DAILY PLAN

Complete removal of liquids/solids in tanks and sumps

Inspect cleaned and plugged sumps/drains

meet with owner to transfer Site Safety, deliver assessment document, express concern about basement

EPA ACTIONS

(1) OSC prepared a memo identifying EPA air monitoring efforts and related Site Safety issues (**APPENDIX 10**). This memo was delivered to the Site owner this day.

(2) OSC directed that sumps previously identified by OSC and USCG-AST be cleaned, inspected, and plugged. Lewis Environmental plugged 3 separate pipes located in 2 sump features. USCG-AST photographed the pipe features and plugs.

(3) OSC and PADEP met with the Site owner and his representatives. The following was accomplished:

A. OSC discussed remaining areas of environmental concern. The OSC delivered a Post-Fire Incident

Assessment containing areas of environmental concern. The document identifies buildings with drums, containers, cylinders, and other items of potential concern. The document makes basic recommendations for addressing areas of concern. Generally, the OSC identified MCC Warehousing (including basement), George Auto Supply, and H building as areas of significant concern. Other areas of concern center on areas with smaller amounts of suspect containers primarily located in C building. The ability for contaminated waters to drain from J building was also identified as an area of concern.

- B. OSC advised of future environmental work. OSC recommended that Site areas be segregated by waste stream (e.g., hazardous, residual, construction/demolition, ACM, PCB) and that demolition operations proceed with goal to keep these areas segregated. Additionally, areas/issues of potential concern should be addressed specifically and separately (e.g., areas identified in assessment document) to avoid mixing of potentially hazardous and non-hazardous items.
- C. OSC advised of potential for decontamination of debris rather than disposal of debris. Certain debris is mixed with pigments that will turn surrounding ground color of pigment in rain events. Other debris is oily. Owner should evaluate decontamination vs. disposal options.
- D. OSC advised that MCC basement area contained contamination that has migrated from the ground floor. The contamination is both liquid and solid form. The area is backfilled and much of the area was not accessible. The owner was advised that this area would likely need to be addressed by equipment and strategy different than that of other parts of the Site.
- E. OSC requested status of work plan. OSC was advised that work plan is not complete. OSC requested that future work in environmental areas (other than MCC Warehousing and adjacent George Auto Supply) proceed under the guidance of a work plan. OSC advised that information contained within owner environmental files should be used in Work Plan (i.e., use available knowledge). PADEP and OSC have advised that government turn-around time would be fast. OSC expects that work in areas of concern would not commence in the absence of a work plan, but that areas of demolition debris in the absence of areas of concern should commence immediately. OSC advised that the remainder of the Site was equivalent to a Time-Critical Removal Action.
- F. OSC forwarded information about EPA efforts for air monitoring and Site Safety. The OSC advised that EPA was functioning as Site Safety when Fire Marshall (Bridgeport) maintained control of Site and EPA was actively working. Now that owner's contractors are conducting all work, the OSC expects that the owner have responsibilities for Site Safety. OSC transferred Site Safety responsibility along with information from 29 CFR 1910.120 discussing components of Site Safety Plan and Site Safety Officer requirements.

(4) OSC determined that emergency response phase of incident was over. OSC would maintain contact with PADEP re: work plan.

(5) Demobilization of EPA and USCG-AST assets occurred this day.

(6) OSC informed that Fire Marshall/Fire Chief returned Site back to owner.

FUTURE EXPECTED ACTIONS

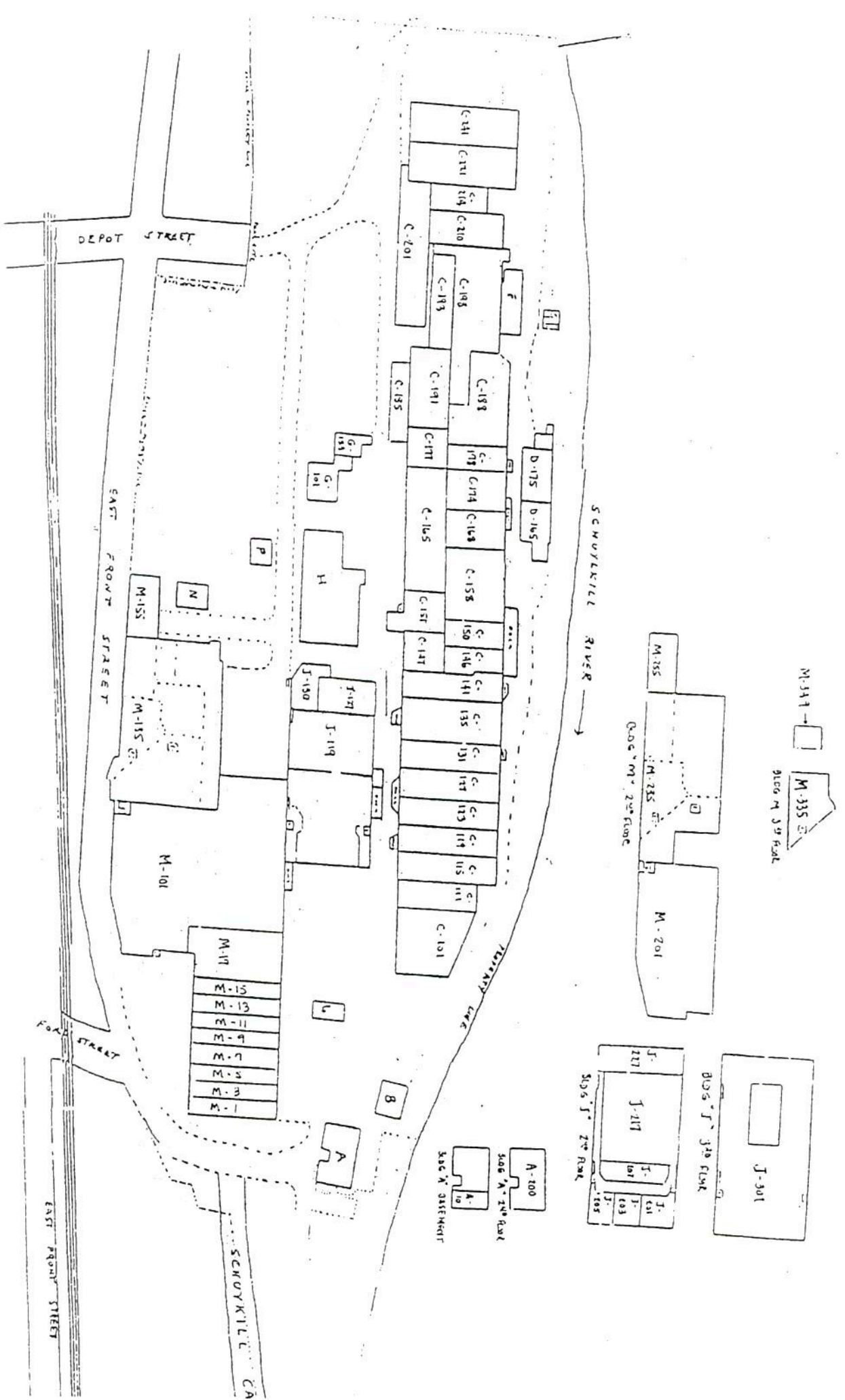
- 1) receive and forward analytical data relating to canal and River and tank and discharge collected 30 and 31 May.
- 2) coordinate with PADEP regarding work plan for Site cleanup

- 3) prepare endangerment determination
- 4) coordinate with PADEP regarding monitoring of cleanup efforts.
- 5) forward this OSC Record to Montgomery County Emergency Services, PADEP, owner.

APPENDIX 1

SITE FIGURES

CONTINENTAL BUSINESS CENTER
BRIDGEPORT, PA.



CONTINENTAL BUSINESS CENTER DIRECTORY

3-2001

| Company | Location | Contact | Telephone | Fax |
|--------------------------------------|---------------|-----------------|----------------|---------------|
| ARB Broadcrumbs | C-193 | B. Borzillo | 610-272-7230 | |
| Becotte Design | A-10 | M. Becotte | 215-641-1257* | |
| Brunner & Lay | M-11 | L. Miller | 610-239-8831 | 239-8832 |
| Bushar Corp. | A-100 | C. Bushar | 610-272-4200 | 292-8493 |
| C & H Engineering | A-103 | T. Harrington | 610-272-5806 | 272-5809 |
| C. J. Robinson Co. | C-241 | C. Robinson | 610-896-5022 | 896-5031 |
| Ed Carcarey <i>NORR</i> | Ground | E. Carcarey | 610-275-1799 | |
| Centex Environment <i>NORR</i> | J-130 | D. Carlson | 610-279-0300 | 279-6930 |
| Chain Mar, Inc. <i>NORR</i> | J-119 | R. DiGiacomo | 610-272-8980* | 279-2807 |
| Colonial Electric <i>KP</i> | J-327 | A. Pedlow | 610-277-8100* | 277-8131 |
| Crecraft for Treecraft | Ground | R. Crecraft | 610-525-1818* | |
| Designers Furniture, Outlet | J-201 | S. Rubin | 610-279-8980 | |
| Dovar Mechanical | M-13 | J. Small | 610-275-5300 | 275-9288 |
| George Auto Supply | C-111 | G. VanGieri | 610-277-5518 | 277-5345 |
| K.T. & Co., Inc. | D-165 | J. Texada | 610-520-0221* | |
| Kaiser Printing | L | D. Kaiser | 610-272-3910 | 272-3910 |
| Keystone Supply | C-131 | K. Barbson | 610-275-4566 | 275-4563 |
| Label Rite, Inc. | C-119 | D. Lawler | 610-279-0166 | 279-4725 |
| League Collegiate Wear | C-135 & J-221 | L. Klebanoff | 610-272-7575 | 272-9175 |
| Lite Tech, Inc. | M-1 | T. Krug | 610-279-5238 | |
| Little Souls | J-301 | G. Wilson | 610-277-9950 | 277-8705 |
| M.C.C., Inc. <i>Al oxide (HPL)</i> | A-200 & C-127 | M. Novakovic | 610-277-2444 | 277-0135 |
| M.C.C. Whse., Inc. | M-101 | M. Helverson | 610-272-6245 | |
| M.L. Floor Covering | C-150 | M. Wacker | 610-948-5147* | |
| Maher Design | P | D. Maher | 610-278-9668 | 278-8642 |
| Mazuk, Inc. | Ground | F. Mazuk | 610-687-8876 | |
| Main Line Lawn Service, Inc. | C-147 | Rick & Brian | 610-292-0673 | |
| Nikobenet, Inc. | J-325 | M. Nikpour | 610-658-2070* | 658-2071 |
| Panther Products East | C-146 | B. Hanson | 800-775-9414 | |
| Pennoni Associates | B | W. Capper | 610-277-2402 | 277-7449 |
| Pennora, Inc. | C-168 | B. Bater-Kearns | 610-337-1402* | 337-1407 |
| Pergamon Corporation | C-174 | J. Altman | 610-239-0721* | |
| Pergine's Produce | G-103 | J. Pergine | 610-272-6564* | |
| Phoenix Corp. | G-101 | L. Braunstein | 610-275-6820 | 275-6822 |
| Printers' Printer | M-155 | P. Hasler | 610-279-9195 | 279-7184 |
| Protection One Alarm | M-9 | D. Gey | 610-272-8098 | |
| Quigley Crucible | A-101 | J. Quigley | 610-272-5450 | 272-5580 |
| Renu Electronics | J-220 | J. Hadick | 610-239-7363 | 239-7365 |
| Restoration Station | C-177 | S. Lyall | 610-279-9181 | 215-491-3102* |
| Robinson Steel Co. | M-3 | B. Flint | 610-279-6600 | 279-6646 |
| Rose Line, Inc. | J-227 | A. Nadler | 610-277-3551 | 277-3554 |
| Salmons Tool & Machine | C-131 | M. Salmons | 610-279-7102 | 272-6778 |
| Savoy Company | J-230 | P. Porter | 610-667-8608* | |
| Seaquay Architectural Millwork | C-221 | L. Knowles | 610-279-1201 | 279-4896 |
| Sherman & Gosweiler <i>Furniture</i> | C-165 | C. Sherman | 610-270-0825 | 270-0826 |
| Steel's Gourmet Sauces | D-175 | J. Steel | 610-277-1230 | 277-1228 |
| Sweetzels, Inc. | C-201 | B. Borzillo | 610-277-6770 | 277-6569 |
| Tech-Pack | M-7 | A. Spont | 610-275-7225 | 275-7951 |
| TriState C&I Assn. of Rentors | A-201 | A. Esposito | 610-239-7470 | 239-7472 |
| U.S. Equipment Brokers | C-188 | H.D. Amato | 610-275-1002** | |
| Valley Forge Candle | C-185 | M. McCabe | 610-277-6770 | 277-6569 |
| Window Associates | J-127 | J. Smith | 610-292-1996* | 292-0872 |
| Wire Crafters, Inc. | C-191 | F. Fullam | 610-272-4484 | 272-4484 |

*Off Premises Telephone

**Sub-Tenant

Printer

Printer

Machine
Shop
Cleaning
Files

CONTINENTAL BUSINESS CENTER

TENANTS LOST IN FIRE

15-May-01

| SQ FT | UNIT | TENANT | KEY |
|---------|-----------|---------------------------------|-----|
| 15,760 | C-193/201 | ARB BREADCRUMBS, INC. | 1 |
| 2,886 | M-11 | BRUNNER & LAY | 2 |
| 3,600 | J-130 | CENTEX ENVIRONMENT | 3 |
| 36,940 | J-119 | CHAIN MAR FURNITURE | 4 |
| 4,100 | D-175 | CLACK STEELE | 5 |
| 1,700 | J-307 | COLONIAL ELECTRIC | 6 |
| 2,850 | M-13 | DOVAR | 7 |
| 34,470 | C-111 | GEORGE SUPPLY ✓ | 8 |
| 4,400 | C-151 | KEYSTONE SUPPLY | 9 |
| 12,000 | C-119 | LABEL RITE ✓ | 10 |
| 11,300 | C-135 | LEAGUE WEAR | 11 |
| 17,420 | J-301 | LITTLE SOULS | 12 |
| 3,600 | C-147 | MAIN LINE LAWN SERVICE | 13 |
| 90,411 | M-101 | MCC WAREHOUSING ✓ | 14 |
| 10,700 | C-127 | MCC, INC. | 15 |
| 3,600 | C-150 | ML FLOORCOVERING | 16 |
| 1,000 | J | NIKOBENET, INC. | 17 |
| 6,200 | C-146 | PANTHER PRODUCTS EAST | 18 |
| 6,000 | C-158 | PENNCORA PRODUCTIONS | 19 |
| 6,827 | M-155/145 | PRINTERS PRINTER | 20 |
| 3,200 | M-9 | PROTECTION ONE | 21 |
| 10,888 | J-220 | RENU ELECTRONICS | 22 |
| 3,600 | C-185, 17 | RESTORATION STATION | 23 |
| 2,035 | J-227 | ROSE LINE, INC. | 24 |
| 6,000 | C131 | SALMONS TOOL & MACHINE | 25 |
| 10,800 | C-165 | SHERMAN/GOSWEILER | 26 |
| 28,968 | C-185/198 | SWEETZELS, INC. | 27 |
| 3,600 | C-178 | TECH-PACK | 28 |
| 100 | J305 | TRI-STATE CLASSN <i>perform</i> | 29 |
| 3,600 | C-185 | VALLEY FORGE CANDLE CO | 30 |
| 4,007 | J-127 | WINDOW ASSOCIATES | 31 |
| 7,200 | C-191 | WIRE CRAFTERS ✓ | 32 |
| 359,762 | | | |

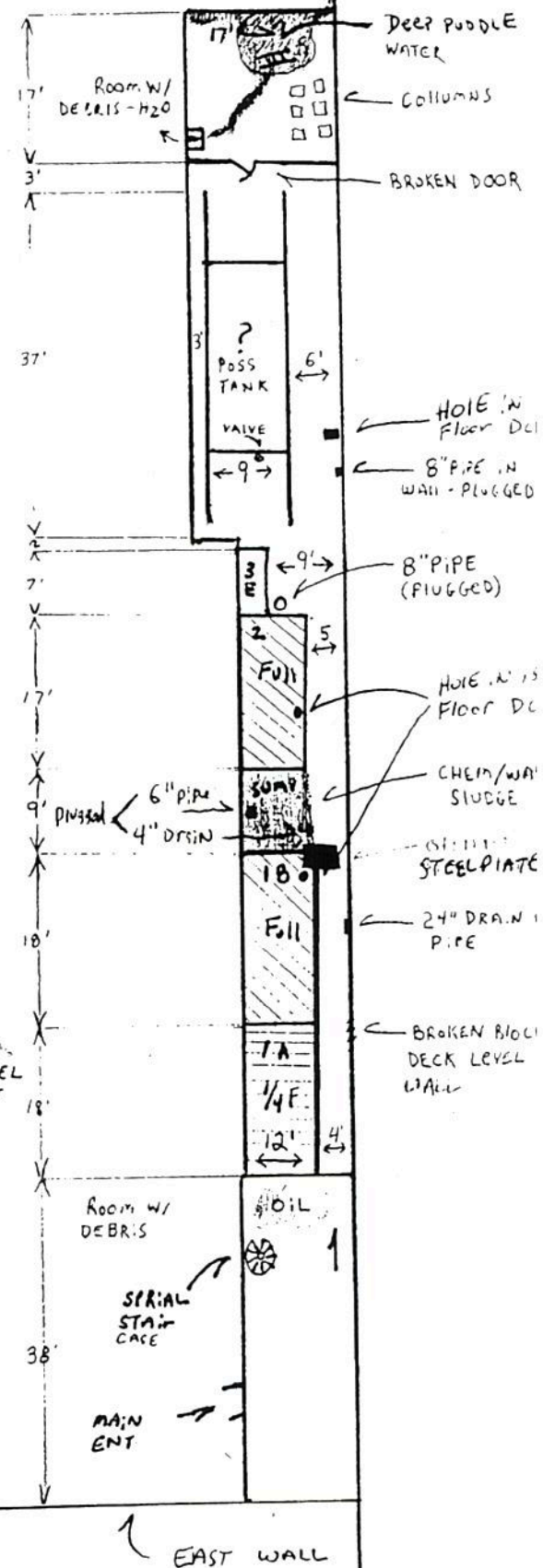
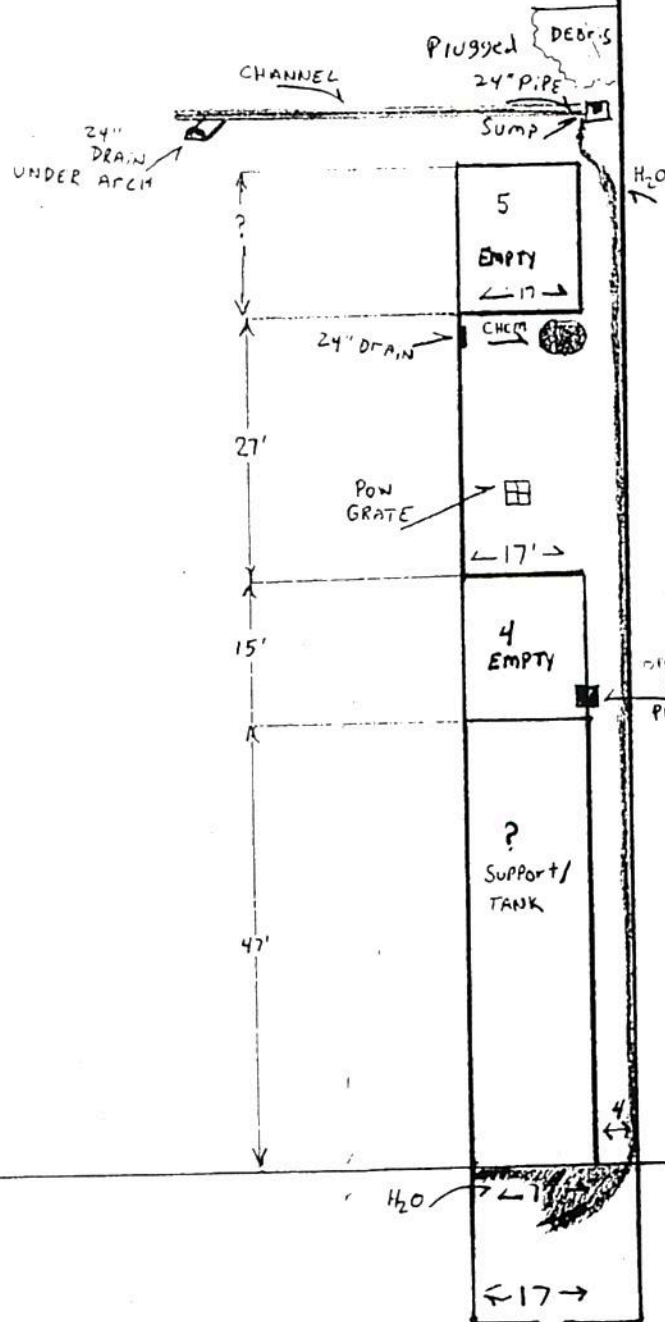
breadcrumb mfg
 mining/construction tools
 office storage & window treatments
 furniture/carpet
 sauces/food products
 electric supply equipment + accessories
 mechanical contracting
 automotive supply
 industrial supplies & safety equip
 printing of labels
 clothing
 dolls
 lawn + tree sucs - pesticides ?
 warehousing / lt mfg. (comprehensive)
 mfg + application of ceramic coatings
 carpet
 fixtures/furnishings
 commercial roofing equipment
 production preps - any
 printing shop - no chemical release
 alarm warehouse
 computer equipment
 restoration of furniture
 fabrics
 machine shop
 cabinet + carpentry
 bakery
 computer
Records
 candle making
VACANT
 welding + spray painting
 can of
 spray
 paint

verbal

✓ have list




BASEMENT WAREHOUSE



* THIS MAP PREPARED BY USCG-AST
AFTER SEVERAL ENTRIES INTO BASEMENT
AREA MAP DEFECTS AN EAST-WEST
TRENDING CORRIDOR (SEE GRID #14
ON CONTINENTAL D. AMONG PLOT)



SCALE 1/20

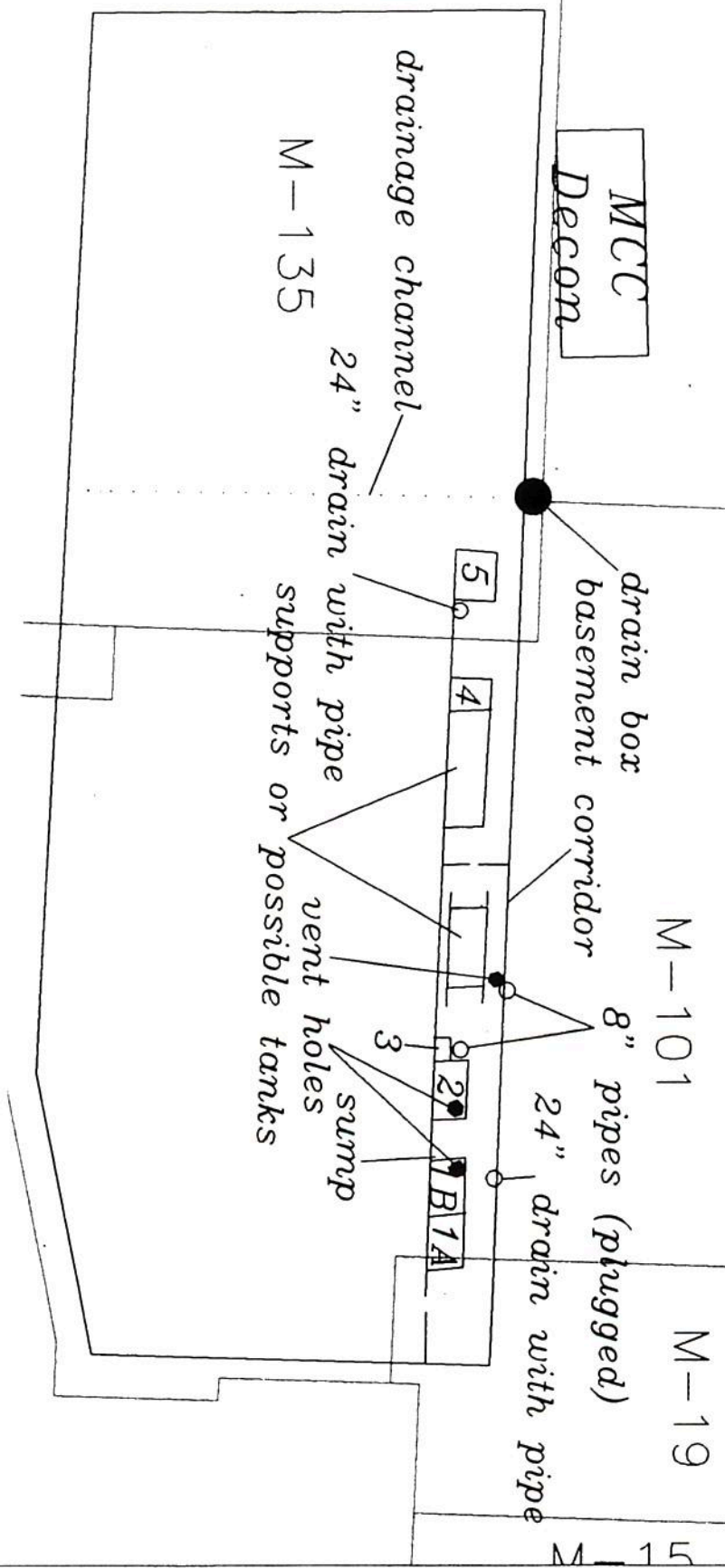
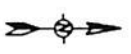
DATE: 9/22/01
SOURCE:


- LEGEND:
-  SURFACE WATER
 -  EXISTING STRUCTURE
 -  RAILROAD

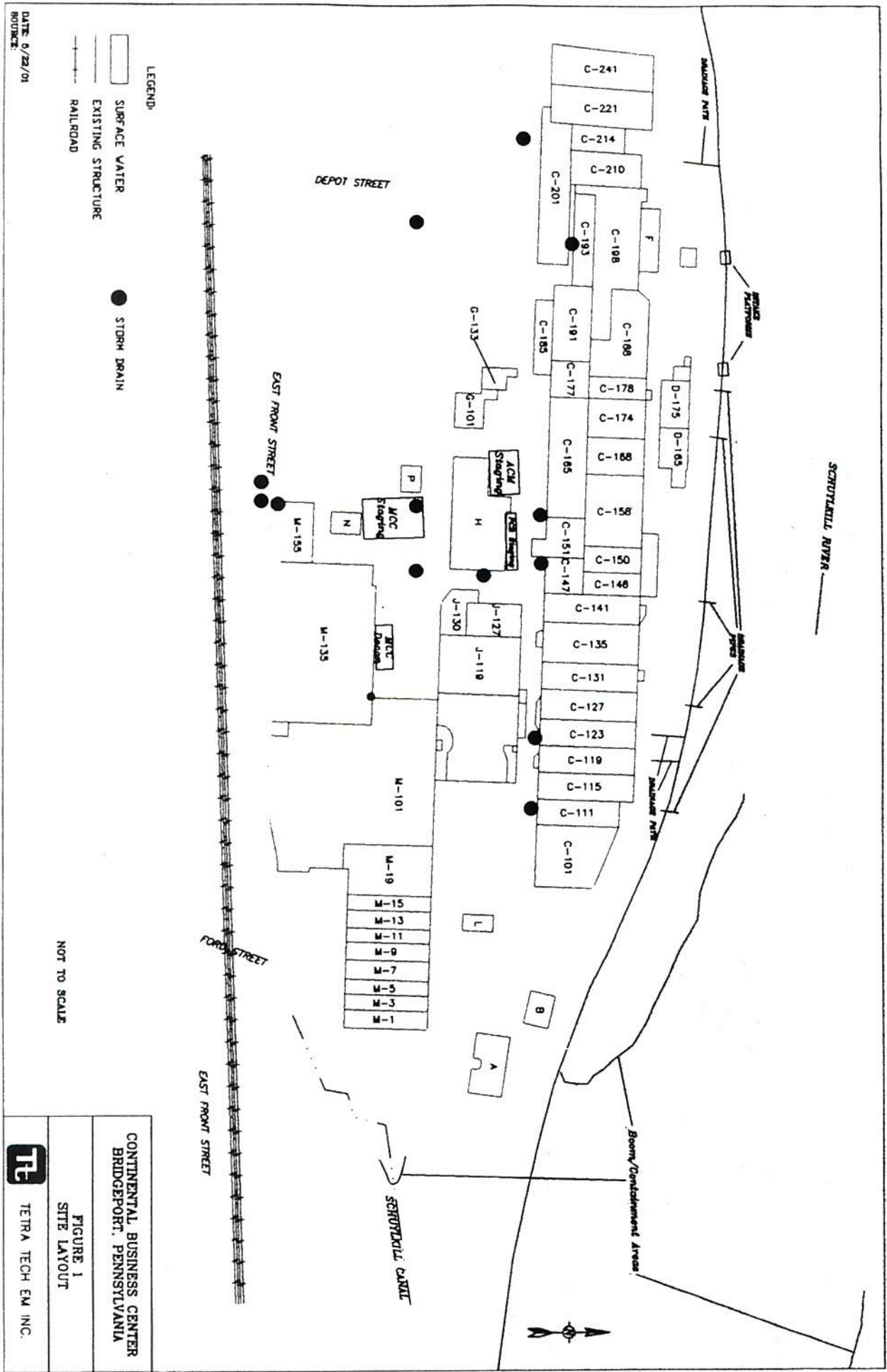
-  STORM DRAIN
-  APPROXIMATE BOUNDARY OF BASEMENT

- TANK SUMMARY
- 1A - 1/4 full
 - 1B - full
 - 2 - full
 - 3 - empty
 - 4 - empty
 - 5 - empty

NOT TO SCALE



| | |
|---|-----------------|
| CONTINENTAL BUSINESS CENTER BRIDGEPORT, PENNSYLVANIA | |
|  | FIGURE 1 |
| | BASEMENT LAYOUT |
| TETRA TECH EM INC. | |



APPENDIX 2

POSSIBLE MCC WAREHOUSE INVENTORY

1/18/61

HTSDR

HAZARDOUS SUBSTANCE SURVEY FORM
HAZ-BRUGG

plastic
drying
granular
resin

BRUGG WAREHOUSING INC.
55 E. FRONT ST. #101
BRIDGEPORT, PA 19405

L. BRUGGEMANN CHEMICAL CO.
15 PEESE AVENUE WHITE OAK
NEWTON SQUARE PA 19478

McDade

ED McDade
610 353-9852

JANUARY-DECEMBER 1980

all the drums
several dozen

CASE

PRODUCT & HAZ INGREDIENTS

PHYS & HEALTH
F F T D

Fish label

1

2123-24-2
105-60-2

BRUGGOLEN C 10
CAPROLACTAM SODIUM SALT
CAPROLACTAM

80% Me
15
100
inhalation or
dermal contact > 0.1
Rapid gases
inhal
as 1st

like Sodium hypochlorite
Two chemical control

71050

105-60-2
2123-24-2

BRUGGOLEN C 20
CAPROLACTAM
CAPROLACTAM HEXANEDI-ISOCYANATE-
PREPOLYMER
HEXAMETHYLENE-1 6-DI-ISOCYANATE
(HDI)

CNS effect

822-06-0

105-60-2
5988-87-9
822-06-0

BRUGGOLEN C20P
CAPROLACTAM
CAPROLACTAM HEXANEDI-ISOCYANATE
ISOCYANATE-PREPOLYMER
HEXAMETHYLENE-1 6-DI-ISOCYANATE
(HDI)

X X

CONFIDENTIAL
872-50-4
822 06-0

BRUGGOLEN C230
ALIPHATIC POLYISOCYANATE
1-METHYL-2-PYRRO-LIDINONE
HEXAMETHYLENE-1 6-DI-ISOCYANATE
(HDI)

"few"
2

CONFIDENTIAL

BRUGGOLEN C540

POLYAMINE 100%

possible
NH3 compounds
NH4+

irritant

CONFIDENTIAL
CONFIDENTIAL
4483-12-5
822-06-0

BRUGGOLEN F10
POLYMER
HDI BASED POLYMER
LITHIUM STEARATE
HEXAMETHYLENE-1 6-DI-ISOCYANATE <0.5%

X X

CONFIDENTIAL
CONFIDENTIAL

BRUGGOLEN F12
ALKYPHENOL DERIVATIVES
TRIAZINE DERIVATIVES

X

CONFIDENTIAL
CONFIDENTIAL

BRUGGOLEN F121
ALKYPHENOL DERIVATIVES
TRIAZINE DERIVATIVES

CONFIDENTIAL BRUGGOLITE PFS
SODIUM SALTS OF SUBMITTED
7757-83-7 SULFUR-OXY ACETIC ACIDS
7752-18-5 SODIUM SULFITE
WATER

13708-85-5 BRUGGOLLEN H-10
PHOSPHONIC ACID DISODIUM SALT

BRUGGOLLEN H-11

CONFIDENTIAL PHOSPHONIC ACID DERIVATE
CONFIDENTIAL SUBSTITUTED AMIDE
CONFIDENTIAL STRICTLY HINDERED PHENOL
DERIVATE

CONFIDENTIAL BRUGGOLLEN H12
CONFIDENTIAL PHOSPHONIC ACID DERIVATE
CONFIDENTIAL ESTER
CONFIDENTIAL STRICTLY HINDERED PHENOL
DERIVATE

BRUGGOLLEN H13

CONFIDENTIAL BRUGGOLLEN H14
CONFIDENTIAL INORGANIC FATTY ACID SALT
CONFIDENTIAL STRICTLY HINDERED PHENOL
DERIVATIVE
CONFIDENTIAL ALKALI SALTS OF PHOSPHINIC &
PHOSPHONIC

(3) [74-31-7 BRUGGOLLEN H20
(4) N,N-DIPHENYL-1
CONFIDENTIAL 4-PHENYLENEDIAMINE 30%
CONFIDENTIAL QUINOLINE BASED POLYMER 15%

(5) CONFIDENTIAL BRUGGOLLEN H21
CONFIDENTIAL QUINOLINE BASED POLYMER
CONFIDENTIAL PHOSPHONIC ACID SALT 10%

7756-02-3 BRUGGOLLEN H30
142-71-2 POTASSIUM BROMIDE
7631-86-9 CUPRIC ACETATE
7440-50-8 SILICON DIOXIDE
(COPPER COMPOUND)

CONFIDENTIAL BRUGGOLLEN H40
SUBSTITUTED PHENOL

91370-04-4 BRUGGOLLEN H41
TRIS(2,4-tert-BUTYL PHENYL)
PHOSPHITE

Phenyl
+
ADOLINE
CO2
CO
Nitz
NOx
HCN
black
cloudy
Smoke
not really
concern level

W rite fine
POX
oxides of phosphorus
w/ dose + smolder
phosphoric
wood acid
effect =
pulmonary
also
w/ POX

| | | |
|--------------|--------------------------------|---|
| CONFIDENTIAL | BRUGGOLEN H160 | X |
| | STERICLY HINDERED PHENOL | |
| | DERIVATIVE | |
| CONFIDENTIAL | ORGANOPHOSPHITE DERIVATE | |
| CONFIDENTIAL | PHOSPHONIC ACID DERIVATE | |
| | BRUGGOLEN H161 | X |
| CONFIDENTIAL | STERIC HINDERED PHENOL | |
| | DERIVATE | |
| CONFIDENTIAL | ORGANOPHOSPHITE DERIVATE | |
| | BRUGGOLEN H163 | |
| CONFIDENTIAL | MIXTURE OF ORGANIC | |
| | ANTIOXIDANTS | |
| CONFIDENTIAL | PHOSPHONIC ACID DISODIUM SALT | |
| | BRUGGOLEN H164 | |
| CONFIDENTIAL | MIXTURE OF ORGANIC | |
| | ANTIOXIDANTS | |
| CONFIDENTIAL | PHOSPHONIC ACID DISODIUM SALT | |
| | BRUGGOLEN H175 | X |
| CONFIDENTIAL | STERICLY HINDERED PHENOL | |
| | DERIVATIVE | |
| CONFIDENTIAL | ORGANOPHOSPHITE DERIVATIVE | |
| CONFIDENTIAL | FATTY ACID ESTER | |
| 7758-02-3 | BRUGGOLEN VP H 320,321,322,323 | X |
| CONFIDENTIAL | POTASSIUM BROMIDE | |
| 7651-55-4 | POTASSIUM HALOGENIDE | |
| | CUPROUS IODIDE | |
| | (COPPER COMPOUND) | |
| CONFIDENTIAL | FATTY ACID DERIVATES | |
| 55068-54-4 | BRUGGOLEN H350 | |
| CONFIDENTIAL | POLYAMIDE -6 | |
| 7440-50-8 | COPPER COMPLEX | |
| | COPPER | |
| | BRUGGOLEN H 3212,3346 | X |
| CONFIDENTIAL | WAXES COPPER & HALOGEN | |
| | COMPOUNDS | |
| 7440-58-0 | COPPER | |
| | BRUGGOLEN H338 | |
| CONFIDENTIAL | COPPER TRIPHENYLPHOSPHINE | |
| | COMPLEX | |
| 25068-54-4 | BRUGGOLEN H 3504 | X |
| CONFIDENTIAL | POLYAMIDE-6 | |
| 7440-50-8 | COPPER & HALOGEN COMPOUNDS | |
| | COPPER | |
| | BRUGGOLEN H3505 | X |

| | | |
|--|---|---|
| 25038-54-4 CONFIDENTIAL | POLYAMIDE-6,66 COPPER 3-HALOGEN | |
| 254038-54-4 CONFIDENTIAL | BRUGGOLEN H3622 POLYAMIDE-66 COPPER 3-HINDERED AMINE COMPOUNDS | |
| 7440-50-0 | COPPER | |
| CONFIDENTIAL CONFIDENTIAL CONFIDENTIAL | BRUGGOLEN L11 PHOSPHONIC ACID, SALT FATTY ACID ESTER OPTICAL BRIGHTNER | |
| CONFIDENTIAL CONFIDENTIAL CONFIDENTIAL | BRUGGOLEN L12 STETIC HINDERED PHENOL DERIVATES OPTICAL BRIGHTENER PHOSPHONIC ACID SALT | |
| | BRUGGOLEN L20 ESTER PHOSPHITE DERIVATE | X |
| CONFIDENTIAL 7631-86-7 103-23-1 | BRUGGOLEN M10 CARBOXYLIC ACID DERIVATIVE SILICON DIOXIDE HEXANEDIOIC ACID BIS(2-ETHYLHEXY)ESTER | X |
| CONFIDENTIAL 832-06-0 | BRUGGOLEN M12 HDI BASED POLYMER HEXAMETHYLENE-1,6 <0.5 DIISOCYANATE | X |
| 25038-54-4 | BRUGGOLEN M1251 POLYAMIDE-COPOLYMER | |
| CONFIDENTIAL CONFIDENTIAL | BRUGGOLEN P12 FATTY ACIDS ESTERS POLYETHYLENE COPOLYMER | |
| 125542-74-7 93763-70-3 | BRUGGOLEN P22, P22F POLYAMIDE AMORPHOUS ALUMININA SILICATE | X |
| CONFIDENTIAL CONFIDENTIAL 73763-70-3 | BRUGGOLEN P30 P31 FATTY ACID DERIVATIVE POLYMER AMORPHOUS ALUMINA SILICATE | X |
| CONFIDENTIAL CONFIDENTIAL | BRUGGOLEN P130 FATTY ACID ESTER POLYAMIDE | X |

CONFIDENTIAL BRUGGOLLEN P203
CONFIDENTIAL POLYAMIDE
CONFIDENTIAL FATTY ACID AMIDE

CONFIDENTIAL BRUGGOLLEN P250
14807-76-6 WAXES
TALC

NA BRUGGOLLEN P 2034
NA POLYAMIDE COPOLYMERS
MINERALS

23038-39-7 BRUGGOLLEN PET 095 110
POLYETHYLENE TEREPHTHALE

105-60 2 CAPROLACTUM SOLID

CONFIDENTIAL BRUGGOLLEN VF 200
POLYAMIDE

149-440 BRUGGOLITE C,E01,F,NF,POWDER
497-19-8 METHANESULFINIC ACID
50-00-0 HYDROXY-SODIUM SALT
SODIUM CARBONATE
FORMALDEHYDE(RESIDUAL))

149-44-0 BRUGGOLITE E02 POWDER
METHANESULSANIC ACID
50-00-0 HYDROXY-SODIUM SALT
FORMALDEHYDE(RESIDUAL)
CAPROLAVAM-HIGI POLYMER

← 149-44-0 BRUGGOLITE C,E01,L40 GRANULES
METHANESULSANIC ACID
497-19-8 HYDROXY-SODIUM SALT
50-00-0 SODIUM CARBONATE
FORMALDEHYDE(RESIDUAL)

149-440 BRUGGOLITE E02 GRANULES
METHANESULSANIC ACID
50-50-0 HYDROXY-SODIUM SALT
FORMALDEHYDE(RESIDUAL)

149-440 HYDROSULFITE AWC GRAN
497-19-8 SODIUM FORMALDEHYDE SULFOXYLATE
SODIUM CARSONATE

1314-13-2 ZINC CARBONATE AC 45.100
3486-33-9 ZINC OXIDE
2042-33-1 ZINC CARBONATE
7440-6-6 ZINC HYDROXIDE
20427-33-1 ZINC COMPOUNDS

file of
E01

| | | |
|------------|------------------------------|-----|
| | ZINC CARBONATE RAC | |
| 1314-13-2 | ZINC OXIDE | |
| 3486-35-9 | ZINC CARBONATE | |
| 2042-58-1 | ZINC HYDROXIDE | |
| 1314-87-0 | LEAD SULFIDE | |
| 1314-13-2 | ZINC COMPOUNDS | |
| 3486-35-9 | | |
| 7440-66-6 | 62% AS ZINC | |
| 20427-58-1 | 62%AS ZINC | |
| 1314-87-0 | LEAD COMPOUNDS | |
| 7439-92-1 | 0.15% AS LEAD | |
| | ZFS(ZN HYDRO METH SULFINATE) | |
| 24887-06-7 | ZINC,BIS(HYDROXY-METHANE- | X |
| | SULFINATO-05,01)-(T-4) | |
| 7757-82-6 | SODIUM SALT | |
| 24887-06-7 | ZINC COMPOUND | |
| 7440-66-6 | 25% AS ZINC | |
| | ZINC OXIDE AC 45,100 | |
| 1314-13-2 | ZINC OXIDE | X |
| 1314-13-2 | ZINC COMPOUND | |
| 7440-66-6 | 80% AS ZINC | |
| | ZINC OXIDE RAC | |
| 1314-13-2 | ZINC OXIDE | X X |
| 1314-87-0 | LEAD SULFIDE | |
| 1314-13-2 | ZINC COMPOUNDS | |
| 7446-66-6 | 80% AS ZINC | |
| 1314-87-0 | LEAD COMPOUND | |
| 7439-92-1 | 0.15% AS LEAD | |

main
245/pigment

Call
18 MAY 01

Jack Udell

215-628-9798

HAZARDOUS SUBSTANCE SURVEY FORM
HAZ-PENT

KOC WAREHOUSING INC
55 E. FRONT ST. BLDG M101
BRIDGEPORT PA 19405

→ Pigment & Dry Color

PENTACHEM, INC
206 WOODED LANE
AMBLER, PA 19002

JANUARY THRU DECEMBER 2000

| CAS# | PRODUCT & HAZ INGREDIENTS | PHYS & HEALTH | |
|-------------|-------------------------------|---------------|-----|
| | | F | P |
| | AEROSOL C-61 SURFACANT | X | X |
| 000067-63-0 | ISOPROPANOL | | |
| 070693-20-8 | OCTADECYLAMINE- | | |
| | OCTADECYLGUANDINE | | |
| | POLYOXYETHANOL | | |
| 000107-21 | ETHYLENE GLYCOL | | |
| | ALKAMULS EL-620 | | X |
| 61791-12-6 | CASTOR OIL + 30 EO- | | |
| | POLYETHOXYLATE | | |
| | 3-AMINO-4 METHOXY-BENZANILIDE | | |
| | BARIUM LITHOL(R) 39-MD-2365 | X | X |
| 1103-38-4 | C.I.PIGMENT RED 49.1 | | |
| 5160-02-1 | C.I.PIGMENT RED 53-1 | | |
| 68198-14-7 | ROSIN BARIUM SALT | | |
| 64742-16-2 | PETROLEUM HYDROCARBON RESIN | | |
| 64742-52-5 | DISTILLATES (PETROLEUM)HYDRO- | | |
| | TREATED HEAVY NAPHTHENIC | | |
| | BASACID BLUE 750 | | X X |
| 1330-39-8 | DYESTUFF | | |
| 7647-14-5 | SODIUM CHLORIDE | | |
| 7757-82-6 | SODIUM SULFATE | | |
| 7440-50-8 | COPPER | | |
| | BASIC YELLOW 29 100% | | X |
| 8012-95-1 | MINERAL OIL | | |
| | BASONYL RED NB 481 | | X |
| 3068-39-1 | DYE | | |
| 6358-36-7 | DYE | | |
| 7647-14-5 | SODIUM CHLORIDE | | |
| 9004-53-9 | DEXTRIN | | |
| | BASONYL RED 485 | | X |
| 3068-39-1 | C.I. BASIC RED 1:1 | | |
| | BECKDOSL(R) AA-141 | X | X |
| MIXTURE | ALKYD RESIN | | |
| 64742-47-8 | MINERAL SPRITS | | |
| 1330-20-7 | XYLENE | | |

| | | |
|------------|---|-----|
| 100-41-4 | ETHYL BENZENE | |
| 108-88-8 | TOLUENE | |
| 17552-99-2 | BON RUBINE PIGMENT RED 52:1 | X |
| 1108-89-5 | CALCIUM LITHOL RED PIGMENT RED 49:2 | X |
| 67801-01-6 | CLAR-ALL RED PIGMENT ORANGE 46 | |
| 71566-54-6 | CHROMOPHTAL RED 2B BENZOIC ACID 3,3 BIS(IMINOCARBONYL(2-HYDROXY-5 1-NAPHTALENEDIYL) AZO))BIS(4-METHYL-(1-METHYLETHYL ESTER | |
| | CYANOAX LTDP ANTIOXIDANT | X |
| | CYANOX 277 ANTIOXIDANT | X X |
| | CYASORB UV-38538 LIGHT STABILEZ | X |
| 81-77-6 | EUPOLEN BLUE 69-2041 PIGMENT | X |
| 147-14-8 | PIGMENT | |
| 9002-88-4 | POLYETHYLENE | |
| 7440-50-8 | COPPER | |
| 1353-86-4 | EUTHYLENE BLACK 00-6005 C/1 CARBON BLACK | X |
| 9002-88-4 | POLYTHYLENE | |
| 04255-15-2 | FLEXO YELLOW 110 LOW DUST BASIC YELLOW 2,NITRATE SALT | X X |
| | GREEN GR 1028-POLYFLO 029-005 | X |
| 147-14-8 | HELIGEN BLUE D 7080 PIGMENT BLUE 15 | |
| 7440-50-8 | COPPER-COMPLEX IN PIGMENT | |
| 147-14-8 | HELIGEN BLUE D 7084 DD PIGMENT BLUE 15 | X |
| 7440-50-8 | COPPER-COMPLEX IN PIFMENT | |
| 574-93-6 | HELIGEN BLUE D 7490 PIGMENT BLUE 16 | X |
| 00023-13-3 | CHLORO PHTHALOCYANINE | |
| 574 93 6 | HELIGEN BLUE D 7565 PIGMENT BLUE 16 | X |

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| 147-14-8 | HELIOGEN BLUE K 6908 | X |
| 1328-53-6 | PIGMENT BLUE 15 | |
| 7440-50-8 | PIGMENT GREEN 7 | |
| | COPPER-COMPLEX IN PIGMENTS | |
| 147-14-8 | HELIOGEN BLUE K 6911 | X |
| 7440-50-8 | PIGMENT BLUE 15 | |
| | COPPER-COMPLEX DUST * MIST | |
| 147-14-8 | HELIOGEN BLUE K 6912 | X |
| 7440-50-8 | PIGMENT BLUE 15 | |
| | COPPER-COMPLEX IN PIGMENT | |
| 147-14-8 | HELIOGEN BLUE L 6875 F | X |
| 7440-50-8 | PIGMENT BLUE 15 | |
| | COPPER-COMPLEX IN PIGMENT | |
| 147-14-8 | HELIOGEN BLUE L 6920 | X |
| 1328-53-6 | PIGMENT BLUE 15 | |
| 7440-50-8 | PIGMENT GREEN 7 | |
| 1333-86-4 | COPPER-COMPLEX IN PIGMENT | |
| | CARBON BLACK | |
| 147-14-8 | HELIOGEN BLUE L 6901 F | X |
| 1328-53-6 | PIGMENT BLUE 15 | |
| 7727-43-7 | PIGMENT GREEN 7 | |
| 7440-50-8 | BARIUM SULFATE | |
| 133-86-4 | COPPER-COMPLEX IN PIGMENT | |
| | CARBON BLACK | |
| 147-14-8 | HELIOGEN BLUE L 6920 | X |
| 1328-53-6 | PIGMENT BLUE | |
| 7440-50-8 | PIGMENT GREEN 7 | |
| 1333-86-4 | COPPER-COMPLEX IN PIGMENT | |
| | CARBON BLACK | |
| 147-14-8 | HELIOGEN BLUE L 6930 | X |
| 7440-50-8 | PIGMENT BLUE 15 | |
| | COPPER-COMPLEX IN PIGMENT | |
| 147-14-8 | HELIOGEN BLUE L 7072 D | X X |
| 7439-92-1 | PIGMENT BLUE 15 | |
| 1344-28-1 | LEAD (AS THE ELEMENT) | |
| | ALUMINUM OXIDE | |
| 147-14-8 | HELIOGEN BLUE L 7080 | X |
| 7440-50-8 | PIGMENT BLUE 15 | |
| | COPPER-COMPLEX IN PIGMENT | |
| 147-14-8 | HELIOGEN BLUE L 7101 F | X X |
| 7440-50-8 | PIGMENT BLUE 15 | |
| 7727-43-7 | COPPER-COMPLEX IN PIGMENT | |
| 7758-97-5 | BARIUM SULFATE | |

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| 574-93-6 | HELIOGEN BLUE L 7560 | X |
| 30023-13-3 | PIGMENT BLUE 16 | |
| | CHLORO PHTHALOCYANINE | |
| 147-14-8 | HELIOGEN GREEN K 8605 | X X |
| 1328-53-6 | PIGMENT BLUE 15 | |
| 1332-58-7 | PIGMENT GREEN 7 | |
| 1333-86-4 | KAOLIN | |
| | CARBON BLACK | |
| 1328-53-6 | HELIOGEN GREEN K 8730 Z | X |
| 7727-43-7 | PIGMENT GREEN | |
| 7440-50-8 | BARIUM SULFATE | |
| 1333-86-4 | COPPER-COMPLEX IN PIGMENT | |
| | CARBON BLACK | |
| 147-14-8 | HELIOGEN GREEN L 8730 | X |
| 1328-53-6 | PIGMENT BLUE 15 | |
| 7440-50-8 | PIGMENT GREEN | |
| 7727-43-7 | COPPER-COMPLEX IN PIGMENT | |
| 1333-86-4 | BARIUM SULFATE | |
| | CARBON BLACK | |
| 14302-13-7 | HELIOGEN GREEN L 9361 | X |
| 7727-43-7 | PIGMENT GREEN 36 | |
| 7440-50-8 | BARIUM SULFATE | |
| | COPPER-COMPLEX IN PIGMENT | |
| 12286-65-6 | HEUCO YELLOW 106100 | X |
| | "KROLOR" RED PIGMENTS | X X |
| | (KR-980-D, KR-981-D) | |
| 12656-85-8 | SILICA ENCAPSULATED RED PGMT 104 | |
| | (CONTAINS LEAD CHROMATE) | |
| 7631-86-9 | AMORPHOUS SILICA | |
| 1047-16-1 | PIGMENT VIOLET | |
| 3089-17-6 | PIGMENT RED 302 | |
| 7439-92-1 | LEAD | |
| 7440-47-3 | CHROMIUM | |
| 7440-36-0 | ANTIMONY | |
| 1044-37-2 | "KROLOR" YELLOW-908 D | X |
| 7631-86-9 | PIGMENT YELLOW 34 | |
| 116563-74-3 | AMORPHOUS SILICA | |
| | PIGMENT YELLOW 34 | |
| 7727-43-7 | LITHOL FAST MAROON L 4763 | X |
| 9008-34-8 | BARIUM SULFATE | |
| 12238-13-2 | MANGANESE RESINATE | |
| 35355-77-2 | PIGMENT RED 53:2 | |
| 7439-96-5 | PIGMENT RED 63:2 | |
| | MANGANESE | |
| | LITHOL FAST SCARLET L 4300 | X |

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| 5280 66-0 | PIGMENT RED 48:4 | |
| 7489-96-5 | MANGANESE-COMPLEX IN PGMNT | |
| 7727-43-7 | BARIUM SULFATE | |
| 13463-67-7 | TITANIUM DIOXIDE | |
| 1332 58-7 | LITHOL RUBINE D 4566 DD | X |
| E281-04-9 | KAOLIN (PGMT WHITE 19) | |
| 9007-13-0 | PIGMENT RED 57:1 | |
| | CALCIUM RESINATE | |
| 5281 04-9 | LITHOL RUBINE | X |
| | PIGMENT RED 57:1 | |
| 141-22-0 | LITHOL SCARLET NBD 4455 | X |
| 7023-61-2 | RICINOLEIC ACID | |
| 15722-05-5 | PIGMENT RED 48:2 | |
| | PIGMENT RED 48:3 | |
| 1333-86-4 | LUCONYL BLACK 0066 | X X |
| 7732-18-5 | CARBON BLACK | |
| 25265-71-8 | WATER | |
| | 1,2-ETHANEDIMINE | |
| | POLYMER W/METHYLOXIRANE & | |
| | OXIRANE | |
| 780-26-7 | LUCONYL RED 3870 | X |
| 7732-18-5 | PIGMENT RED 122 | |
| 24108-89-2 | WATER | |
| 25265-71-8 | PIGMENT RED 123 | |
| 26316-40-5 | DIPROPYLENE GLYCOL | |
| | 1,2-ETHANEDIAMINE | |
| | POLYMER W/METHYLOXIRANE & | |
| | OXIRANE | |
| 111-46-6 | LUCONYL YELLOW 1916 | X X |
| 7732-18-5 | DIETHYLENE GLYCOL | |
| 51274-001 | WATER | |
| | PIGMENT YELLOW 42 | |
| 6538-31-2 | LUNA YELLOW NBL 1277 | X |
| 9007-13-0 | PIGMENT YELLOW 74 | |
| 68187-76-3 | CALCIUM RESINATE | |
| | CASTOR OIL, SULFATE, SODIUM SALT | |
| 9008-54-7 | LURAN S 797 SE UV NATURAL, | X |
| 26299-47-8 | ASA COPOLYMER | |
| | STYRENE ACRYLONITRILE COPOLYMER | |
| | BUTYLACRYLATE STYRENE | |
| | ACRYLONITRI ()LE COPOLYMER | |
| 9002-88-4 | LUWAX AF31 | X |
| | POLYETHYLENE | |
| | LUWAX AL3 POWDER | X |

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|--------------------------|--|-----------|-----|
| 9002-88-4 | POLYETHYLENE | | |
| 9002-88-4 | LUWAX AMB ETHENE, HOMOPOLYMER | | X |
| 9003-07-0 | LUWAX 9675 WAX POWDER 1-PROPENE, HOMOPOLYMER | | X |
| 68441-17-8 | LUWAX OA PASTILLES OXIDIZED POLYETHYLENE | | X |
| 9007-13-0 | MARDON RT-792-D | | X |
| 1503-48-6 | CALCIUM RESINATE | | |
| 1047-16-1 | QUINACRIDONEQUINONE | | |
| 1503-48-6 | QUINO(2,3-B)ACRIDINE-7, 14-DIONE, 5,12-DIHYDRO- | | |
| 5862-38-4 | QUINO(2,3-B)ACRIDINE-6,7,13,14 (5H,12H)-TETRONE | | |
| 9007-13-0 | QUINO(2,3-B)ACRIDINE-7,14-DIONE, 5,6,12,13-TETRAHYDRO RESIN ACIDS AND ROSIN ACIDS, CALCIUM SALTS | | |
| 50-00-0 | MICRONAL B 50 | | X X |
| 111-42-2 | FORMALDEHYDE | a/ | |
| 540-69-2 | DIETHANOLAMINE | 1.0 | |
| 7732-18-5 | AMMONIUM FORMATE | >1 | |
| 9003-08-1 | WATER | >1 | |
| 38640-62-9 | MELAMINE-FORMALDEHYDE COPOLYMER | >1 | |
| 64742-46-7 | DIISOPROPYL-NAPHTHALENE DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE | >1 6,8 | |
| | NAPHTOL AS-OL | | |
| PROPRIETARY 7440-47-3 | NEOZAPON ORANGE 245 SOLVENT ORANGE 56 CHROMIUM III-AS COMPLEX PIGMENT | | X |
| 80-09-1 75601-78-4 | NEOZAPON ORANGE HB 271 4,4'-SULFONYLBIS-PHENOL SOLVENT ORANGE 20 (A CR+3 COMPLEX DYE)+ CHROMIUM-AS COMPLEX | | X |
| 467-68-0 4005-68-9 | NEPTUN BLACK X18 POWDER SOLVENT VIOLET 9 ACID YELLOW 36 | | X X |
| 4197-25-5 62-53-3 | NEPTUN BLACK X60 DYE ANILINE | | X X |

None

no msh)

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| 1528 51-4 | NEPTUNE BLUE LB 722 | X |
| 7440-50-8 | SOLVENT BLUE 38 | |
| | COPPER-COMPLEX IN PIGMENT | |
| 495-54-5 | NEPTUNE ORANGE BASE 206 LD | X |
| 8012-95-1 | SOLVENT ORANGE 3 | |
| | PARAFFIN OILS | |
| 54 90 94 8 | NEPTUNE VIOLET BASE NR 604 | X X |
| 52060-58-7 | MICHLER'S KETONE | |
| | DYE | 6.5 >99 |
| 3521-31-3 | PALIOGEN MAROON FK 4152 | X |
| 65997-05-9 | PIGMENT RED 179 | |
| | ROSIN-POLMERIZED | |
| PROPRIETARY | PALIOGEN RED L 3675 | X |
| 7440-02-0 | RED PIGMENT (Ni12 COMPLEX PGMT) | |
| | NICKEL-COMPLEX IN PIGMENT | |
| 3049-71-6 | PALIOGEN RED L 3910 HD | X |
| | PIGMENT | |
| 7727-43-7 | PALIOGEN YELLOW L 2145 H | X |
| 36868-99-0 | BARIUM SULFATE | |
| 68286-90-3 | PIGMENT YELLOW 139 | |
| 7440-36-0 | PIGMENT BROWN 24 | |
| 7440-47-3 | CHROMIUM-IN PIGMENT | |
| | ANTIMONY-IN PIGMENT | |
| 7727-43-7 | PALIODOL BLACK L 0080 | X |
| 75576-75-5 | BARIUM SULFATE | |
| 7440-47-3 | PIGMENT BLACK 1 | |
| | CHROMIUM VI-IN PIGMENT | |
| 74336-59-7 | PALIODOL ORANGE L 3952 HD | X |
| | PIGMENT | |
| 36868-99-0 | PALIODOL YELLOW K 1841 D | X |
| | PIGMENT | |
| 30125-47-4 | PALIODOL YELLOW L 0906 HD | X |
| | PIGMENT YELLOW 138 | |
| 36868-99-0 | PALIODOL YELLOW L 1620 | X |
| PROPRIETARY | PIGMENT YELLOW 139 | |
| | ADDITIVE | |
| 7727-43-7 | PALIODOL YELLOW L 2140 HD | X |
| 36868-99-0 | BARIUM SULFATE | |
| | PIGMENT YELLOW 139 | |
| 3520-72-7 | PERMANENT ORANGE G | |
| | PIGMENT ORANGE 13 | |

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|-------------|----------------------------|-----|
| 7023-61-2 | PERMANENT RED 2B | |
| 7732-18-5 | B/S PRESSCAKE | X |
| | PIGMENT RED 40:2 | |
| | WATER | |
| 147-14-8 | PIGSMOSOL BLUE 6900 | X |
| 7440-50-8 | PIGMENT BLUE 15:1 | |
| 9084-06-4 | COPPER-COMPLEX IN PIGMENT | |
| | FORMALDEHYDE- | |
| | NAPHTHALENESULFONIC | |
| 147-14-8 | QUICKSPERSE INK BLUE 7149 | X X |
| 1314-23-4 | PIGMENT | |
| | ZIRCONIUM OXIDE | |
| 7727-43-7 | QUINDO RED R-6704 | X |
| 26896-20-8 | BARIUM SULFATE | |
| 1047-16-1 | NEODECANOIC ACID | |
| 7439-92-1 | PIGMENT VIOLET 19 | |
| | LEAD | |
| 7727-43-7 | QUINDO VIOLET RV-6951 | X |
| 1047-16-1 | BARIUM SULFATE | |
| 7439-92-1 | PIGMENT VIOLET 19 | |
| 7440-02-0 | LEAD | |
| | NICKEL | |
| 5160-02-1 | RED LAKE C | X |
| | PIGMENT RED 53:1 | |
| 63022-09-3 | RHODAMINE B PMA | X |
| | PIGMENT VIOLET 1 | |
| 5627-12-2 | RHODAMINE YS SMA | X |
| 1332-58-7 | PIGMENT RED 81:2 | |
| | KAOLIN CLAY | |
| 15793-73-4 | SICO FAST ORANGE NS D 2851 | X |
| | PIGMENT | |
| 6335-44-2 | SICO FAST RED L 3855 | X |
| 7727-43-7 | PIGMENT | |
| | BARIUM SULFATE | |
| 5667-15-7 | SICO FAST YELLOW NBD 1760 | X |
| 8050-09-7 | PIGMENT YELLOW 83 | |
| PROPRIETARY | ROSIN | |
| | SURFACTANT | |
| 3462-63-1 | SICO ORANGE L 3052 HD | X |
| 7727-43-7 | PIGMENT ORANGE 5 | |
| | BARIUM SULFATE | |

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| 67801-01-8 | SICO ORANGE NB D 2855 | |
| 68187-76-8 | PIGMENT (CONTAINS BARIUM) | X |
| 129212-12-0 | CASTOR OIL | |
| | ACCESSORY PIGMENT | |
| | (CONTAINS BARIUM) | |
| 2425-85-6 | SICO RED NBL 3470, 3751 | - 91% X |
| 49744-28-7 | PIGMENT RED 2 | > 1.0 |
| 68187-76-8 | 2-NAPHTHALENOL, | > 1.0 |
| | 1-((4-METHOXY-2-NITROPHENYL)AZO) | |
| | CASTOR OIL, SULFATED, SODIUM SALT | |
| 2425 | SICO RED NBL 3841 | 88% X |
| 49744-28-7 | PIGMENT | > 1 |
| 68187-76-8 | 2-NAPHTHALENOL, | > 1 |
| | 1-((4-METHOXY-2-NITROPHENYL)AZO) | |
| | CASTOR OIL, SULFONATED, SODIUM SALT | |
| 1335-30-4 | SICO YELLOW NBD 1360 | X |
| 5468-75-7 | ALUMINUM SILICATE, HYDRAT | |
| PROPRIETARY | PIGMENT YELLOW 14 | |
| | SURFACTANT | |
| 6358-31-2 | SICO YELLOW FR L 1252 | X |
| 7727-43-7 | PIGMENT YELLOW 74 | |
| 13463-67-7 | BARIUM SULFATE | |
| | TITANIUM DIOXIDE | |
| 68187-51-9 | SICOPAL BROWN K 2595 | X |
| 20 | PIGMENT BROWN 31 | |
| | ZINC COMPOUNDS | |
| 12737-27-8 | SICOPAL BROWN K 2795 | X |
| 7440-47-3 | PIGMENT | |
| | CHROMIUM III-IN PIGMENT | |
| 14059-33-7 | SICOPAL YELLOW L 1100 | X |
| 1344-28-1 | PIGMENT YELLOW 184 | |
| 7758-87-4 | ALUMINUM OXIDE | |
| 7779-90-9 | CALCIUM PHOSPHATE | |
| | ZINC PHOSPHATE | |
| 13565-96-3 | SICOPAL YELLOW L 1110 | X |
| 14059-33-7 | BISMUTH MOLYBDATE | |
| 7439-98-7 | BISMUTH VANADATE | |
| | MOLYBDEUM-IN PIGMENT | |
| 1306-58-3 | SICOPAL YELLOW L 1112 | X |
| 13565-96-3 | CERIUM OXIDE | |
| 14059-33-7 | BISMUTH MOLYBDATE | |
| | BISMUTH VANADATE | |
| | MOLYBDEUM-IN PIGMENT | |
| | SICOPLAST BLUE 68-0850 | X |

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|-------------|---|---|
| 147-14-8 | PIGMENT BLUE 15 (A CU+2 COMPLEX PIGMENT) | |
| 7440-50-8 | COPPER-COMPLEX IN PIGMENT | |
| 1314-35-3 | TUNGSTEN OXIDE | |
| 1345-16-0 | PIGMENT BLUE 28 | |
| 7440-48-4 | COBALT-IN PIGMENT | |
| 147-14-8 | SICOPLAST V BROWN 39-0420 | X |
| 7440-50-8 | PIGMENT BLUE 15:1 | |
| 3564-99-1 | COPPER-IN PIGMENT | |
| 68412-38-4 | ADDITIVE | |
| 7440-36-0 | PIGMENT YELLOW 164 | |
| | MANGANESE-IN PIGMENT | |
| | ANTIMONY-IN PIGMENT | |
| 3049-71-6 | SICOPLAST RED 32-1720 | X |
| 68187-51-9 | PIGMENT RED 178 | |
| 20 | PIGMENT YELLOW 119 | |
| | ZINC COMPOUNDS | |
| 8007-18-9 | SICOPLAST RED NB 36-0330 | X |
| 7440-02-0 | PIGMENT YELLOW 53 | |
| 7440-36-0 | NICKEL-IN PIGMENT | |
| PROPRIETARY | ANTIMONY-IN PIGMENT | |
| | PROPRIETARY ORANGE PIGMENT | |
| 5521-31-3 | SICOPLAST RED 37-0270 | X |
| 8007-18-9 | PIGMENT RED 179 | |
| 7440-36-0 | PIGMENT YELLOW 53 | |
| | ANTIMONY & COMPOUNDS | |
| | (AS PIGMENTS) | |
| 7440-02-0 | NICKEL COMPOUNDS (AS PIGMENT) | |
| 3049-71-6 | SICOPLAST RED NB 37-0280 | X |
| 7727-43-7 | PIGMENT RED 178 | |
| 68186-90-3 | BARIUM SULFATE | |
| 7440-36-0 | PIGMENT BROWN 24 | |
| 7440-47-3 | ANTIMONY-IN PIGMENT | |
| | CHROMIUM-IN PIGMENT | |
| 8007-18-9 | SICOPLAST YELLOW NB 19-0720 | X |
| 7440-02-0 | PIGMENT YELLOW 53 | |
| 7440-36-0 | NICKEL-IN PIGMENT | |
| 65212-77-3 | ANTIMONY-IN PIGMENT | |
| | PIGMENT YELLOW 163 | |
| 7779 50-0 | SICOR ZNP/S | X |
| 80 | ZINC PHOSPHATE | |
| | ZINC COMPOUNDS | |
| 8007-18-9 | SICOTAN YELLOW K 1010.1011 | X |
| 7440-02-0 | PIGMENT YELLOW 53 | |
| 7440-36-0 | NICKEL-IN PIGMENT | |
| | ANTIMONY IN PIGMENT | |

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|--------------|---|-------|---|
| 8007-18-9 | SICOTAN YELLOW L 1012 | 77% | X |
| 7440-02-0 | PIGMENT YELLOW 53 | | |
| 7440-36-0 | NICKEL-IN PIGMENT | | |
| 13530-54-6 | ANTIMONY-IN PIGMENT | | |
| ✓ 10563-26-5 | ALUMINUM MONOHYDROGEN PHOSPHATE | >1.0% | |
| | BIS (3-AMINOPROPYL) ETHYLENEDIAMINE | 1.0% | |
| | SICOTAN YELLOW L 1910 | | X |
| | K 2001 | | |
| | DBK 2080 FG | | |
| 68186-90-3 | PIGMENT BROWN 24 | | |
| 7440-47-3 | CHROMIUM-IN PIGMENT | | |
| 7440-36-0 | ANTIMONY-IN PIGMENT | | |
| | SICOTAN YELLOW K 2107 FG | | X |
| 10530-54-6 | ALUMINUM PHOSPHATE | | |
| 68186-90-3 | PIGMENT BROWN 24 | | |
| 7440-47-3 | CHROMIUM-IN PIGMENT | | |
| 7440-36-0 | ANTIMONY-IN PIGMENT | | |
| | SICOTRANS RED K 2819 | | X |
| | L 2915, 2917, 2917 | | |
| 1309-37-1 | FERRIC OXIDE | | |
| | SICOTRANS YELLOW L 1915, 1916 | | X |
| 51274-00-1 | PIGMENT YELLOW 42 | | |
| | THERMOPLAST BLUE 684 | | X |
| 81-48-1 | DYESTUFF | | |
| 128-80-3 | DYESTUFF | | |
| | THERMOPLAST BLACK X70 | | X |
| 81-48-1 | DYE | | |
| 4702-90-3 | DYE | | |
| | THERMOPLAST YELLOW 104 | | X |
| 4702-90-3 | DYE | | |
| ✓ 41556-26-7 | TINUVIN 765 | | X |
| ✓ 52919-37-7 | BIS(1,2,2,6,6-PENTAMETHYL- 4-PIPERIDINYL)SEBACATE | | |
| | METHYL 1,2,2,6,6-PENTAMETHYL- 4-PIPERIDINYL SEBACATE | ? | |
| | TRANS-OXIDE RED | | |
| | YELLOW 275-0049 (002-026) | | |
| | ZAPON* BLACK X 51 | | X |

3/13/87

ind. of
loss of
concern
in fire

25+50 lb bags
paint pigments
lead chromate

Issue of smaller
colorimetric tubes

HAZARDOUS SUBSTANCE SURVEY FORM
HAZ-DURR

DCC WAREHOUSING INC
55 E. FRONT ST. N101
BRIDGEPORT PA 19405

JANUARY THRU DECEMBER 2001

CASH PRODUCT & HAZ INGREDIENTS

DULAB FLAMEBLOC 488

- ✓ 50-00-0 BUSAN 1024 FORMALDEHYDE
- ✓ 7602-90-4 1-METHYL-3,5,7-TRIAZA-1-AZONIATRICYCLODECANE CHLORIDE

market and
one lot
AT least
new product

- ✓ 51-20-3 BUSAN 1025 NAPIHTALENE
- ✓ 21564-17-0 2-(THIOCYANOMETHYLTHIO) BENZOTHAZOLE
- ✓ 6817-18-6 METHYLENE BIS(THIOCYANATE)
- ✓ 872-30-4 N-METHYL-2-PYRROLIDONE
- ✓ 64742-94-5 AROMATIC SOLVENT

- ✓ CORROSIVE
- 2122-20-4 BUSAN 1078 2-METHYL-4 ISOTHIAZOLIN-3-ONE
- 26172-53-4 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE
- 10977-60-3 MAGNESIUM NITRATE

- 19701-59-2 BUSAN 11-M1,11-M2 BARIUM METABORATE MONOHYDRATE

BUSPERSE 47

- 1314-13-2 BUTROL 25 ZINC OXIDE
- 13701-59-2 BARIUM METABORATE MONOHYDRATE

- 1344-37-2 DCC 1007 LEAD CHROMATE
- 7758-97-6 LEAD SULPHATE
- 7446-14-2 BARIUM (AS THE ELEMENT)
- 7440-37-3 CHROMIUM (AS THE ELEMENT)
- 7439-92-1 LEAD (AS THE ELEMENT)
- 1344-37-3 ALUMINUM OXIDE

- 1344-37-3 DCC 1007 LEAD CHROMATE
- 7758-97-6 LEAD SULPHATE
- 7440-37-3 BARIUM (AS THE ELEMENT)

ind. of
Chemical
fire
- animal
HCL
HCN or Cyanic acid

DURR MARKETING ASSOCIATES
PO BOX 17600
PITTSBURGH, PA 15205

Deborah Cadley
412-829-2300
hm# 412-681-1896

PHYS & HEALTH

F P R I D

Should burn up - blade alk
acid smoke
eye irritant
hand irritant
redness of skin

12%

13

12

possibly HCL
Not COX

56

10

10

25

96

15
14

combustible in fire
Just like a
shooting fire

possibly HCN

0.35

1.15

1.7

X X

X X

Cerata Release
SARA 302

80,000 lbs
Per Durr

| | | |
|------------|---------------------------|-----|
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | |
| 1344-37-2 | DCC 1019 | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 1309-64-4 | ANTIMONY TRIOXIDE | |
| 7440-36-0 | ANTIMONY (AS THE ELEMENT) | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | |
| 1344-37-2 | DCC 1026 1032 | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | |
| 1344-37-2 | DCC 1034 5035 | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 1309-64-4 | ANTIMONY TRIOXIDE | |
| 7440-36-0 | ANTIMONY (AS THE ELEMENT) | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | |
| 1344-37-2 | DCC 1077 1080 Y-958-1.D | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7744-16-2 | LEAD SULPHATE | |
| 7744-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | |
| 7440-47-3 | BARIUM (AS THE ELEMENT) | |
| 1344-37-2 | DCC 1091 | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 1309-64-4 | ANTIMONY TRIOXIDE | |
| 7440-36-0 | ANTIMONY (AS THE ELEMENT) | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | |
| 2512-29-0 | DCC 1104 | 2 |
| 52320-66-8 | DCC 1112 | 2 |

| | | | |
|------------|------------------------------|---|-----|
| 6528-34-3 | DCC 1114 | X | |
| 6528-34-3 | DCC 1115 | X | |
| 6528-34-3 | DCC 1117 | X | |
| 6358-31-2 | DCC 1120 | X | |
| 13515-40-7 | DCC 1121 | X | |
| 5468-78-7 | DCC 1201 1202 | X | |
| 6358-35-6 | DCC 1205 | X | |
| 5567-15-7 | DCC 1242 1245 | X | |
| 12286-65-6 | DCC 1363 | X | X X |
| 12656-85-8 | DCC 1606 1607 1608 5610 | | X X |
| 7758-97-6 | LEAD CHROMATE | | |
| 7446-14-2 | LEAD SULPHATE | | |
| | MOLYBDEUM COMPOUNDS N.O.S. | | |
| 1309-64-4 | ANTIMONY TRIOXIDE | | |
| 7440-36-0 | ANTIMONY (AS THE ELEMENT) | | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | | |
| 1344-28-1 | ALUMINUM OXIDE | | |
| 12656-85-8 | DCC 1614 | | X X |
| 7758-97-6 | LEAD CHROMATE | | |
| 7446-14-2 | LEAD SULPHATE | | |
| | MOLYBDENUM COMPOUNDS N.O.S. | | |
| 1309-64-4 | ANTIMONY TRIOXIDE | | |
| 7440-36-0 | ANTIMONY (AS THE ELEMENT) | | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | | |
| 1344-28-1 | ALUMINUM OXIDE | | |
| 12656-85-8 | DCC 1622 1623 1624 YE-941-LD | | X X |
| 7758-97-6 | LEAD CHROMATE | | |
| 7446-14-2 | LEAD SULPHATE | | |
| | MOLYBDENUM COMPOUNDS NOS | | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | | |
| 1344-28-1 | ALUMINUM OXIDE | | |
| 3520-72 7 | DCC 1802 | X | |
| 6505-28-6 | DCC 1616 | X | |
| 2425-85-6 | DCC 2222 2254 | X | |

| | | | |
|------------|-----------------------------|---|-----|
| 1103-39-5 | DCC 2303 2304 | X | |
| 1103-39-4 | DCC 2318 | X | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 5160-02-1 | DCC 2520 | X | |
| 7744-39-3 | BARIUM (AS THE ELEMENT) | | |
| 1344-37-2 | DCC 2603 | | X X |
| 7759-97-6 | LEAD CHROMATE | | |
| 7446-14-2 | LEAD SULPHATE | | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | | |
| 5281-04-9 | DCC 2720 | X | |
| | DCC 2738 | | |
| 5281-04-9 | LITHOL RUBINE | | |
| 7023-61-2 | DCC 2751 | X | |
| 17552-99-2 | DCC 277E | X | |
| 7535-41-3 | DCC 2780 | X | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 2786-76-7 | DCC 2870 7170 | X | |
| 12656-65-8 | DCC 5310 | | X X |
| 7759-97-6 | LEAD CHROMATE | | |
| 7446-14-2 | LEAD SULPHATE | | |
| | MOLYBDENUM COMPOUNDS N.O.S. | | |
| 1309-64-4 | ANTIMONY TRIOXIDE | | |
| 7440-38-0 | ANTIMONY (AS THE ELEMENT) | | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | | |
| 1344-28-1 | ALUMINUM OXIDE | | |
| 12236-31-2 | DCC 6005 | X | |
| 7439-96-5 | MANGANESE (AS THE ELEMENT) | | |
| 12236-62-3 | DCC 7036 | X | |
| 6352-31-2 | DCC 7074 | X | |
| 1344-37-2 | DCC 9145 | | X X |
| 7446-97-6 | LEAD CHROMATE | | |
| 7446-14-2 | LEAD SULPHATE | | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | | |

| | | |
|------------|-----------------------------|-----|
| 1344-37-2 | KY 787D 795D 907D | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-37-2 | KY 788D 781D 908D | X X |
| 7758 97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 12656-65-8 | KO 786D 789D 906D 909D | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 1309-64-4 | MOLYBDENUM COMPOUNDS N.O.S. | |
| 7440-36-0 | ANTIMONY TRIOXIDE | |
| 7440-39-3 | ANTIMONY (AS THE ELEMENT) | |
| 7440-47-3 | BARIUM (AS THE ELEMENT) | |
| 7439-92-1 | CHROMIUM (AS THE ELEMENT) | |
| | LEAD (AS THE ELEMENT) | |
| 1344-37-2 | KY 790D | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7444-14-3 | LEAD SULPHATE | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-37-2 | KY 791D | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-37-2 | Y 938LD 934LD | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 7440-39-3 | BARIUM (AS THE ELEMENT) | |
| 7440-47-3 | CHROMIUM (AS THE ELEMENT) | |
| 7439-92-1 | LEAD (AS THE ELEMENT) | |
| 1344-38-1 | ALUMINUM OXIDE | |
| 12656-65-8 | YE 937LD 998LD 971LD | X X |
| 7758-97-6 | LEAD CHROMATE | |
| 7446-14-2 | LEAD SULPHATE | |
| 1309-64-4 | MOLYBDENUM COMPOUNDS N.O.S. | |
| 7440-36-3 | ANTIMONY TRIOXIDE | |
| 7440-39-3 | ANTIMONY (AS THE ELEMENT) | |
| | BARIUM (AS THE ELEMENT) | |

| | | | |
|------------|-----------------------------|------------------|-----|
| 7450-47-3 | CHROMIUM | (AS THE ELEMENT) | |
| 7439-92-1 | LEAD | (AS THE ELEMENT) | |
| 1344-28-1 | ALUMINUM OXIDE | | |
| 7727-43-7 | BLANC-FIXE MICRO F N | | X |
| | BARIUM SULFATE | | |
| MIXTURE | KEMIRA 220 | | X X |
| 13463-67-7 | TITANIUM DIOXIDE | | |
| 21645-51-2 | ALUMINIUM HYDROXIDE | | |
| | KEMIRA 600I 630 | | X |
| 13463-67-7 | TITANIUM DIOXIDE | | X X |
| | KEMIRA RDI-S | | X X |
| 13463-67-7 | TITANIUM DIOXIDE | | |
| 21645-51-2 | ALUMINIUM HYDROXIDE | | |
| 7631-86-9 | SILICA AMORPHOUS | | |
| 1314-23-4 | ZIRCONIUM DIOXIDE AMORPHOUS | | |
| | LITOPONE D DS L E | | X X |
| 1345-05-7 | ZINC SULFIDES | | |
| | SACHTLITH L HD-S | | X X |
| 1314-98-3 | ZINC SULFIDES ZNS | | |

2000

HAZARDOUS SUBSTANCE SURVEY FORM
HAZ-ETS

KCC WAREHOUSINGS, INC
55 E. FRONT STREET
BRIDGEPORT, PA 19403

Not asked
ENERGY TECH SYSTEMS
270 E. LANCASTER AVENUE
FRAZER, PA 19355

JANUARY THRU DECEMBER 2000

| CAS# | PRODUCT & HAZ INGREDIENTS | PHYS & HEALTH F P R I D |
|--|---|----------------------------|
| 112243 25950630 | ANCHORBOLT ADHESIVE HARDENER TETA. REACTION PRODUCTS WITH PROPYLENE OXIDE | X X |
| 1353864 14808607 15625895 25068386 | ANCHORBOLT ADHESIVE RESIN CARBON BLACK CRYSTALLINE SILICA ACRYLATE MONOMER BISPHENOL A DIGLYCIDYL ETHER RESIN | X X X |
| 26142303 84742 | EPICHLORHYDRIN-POLYGLYCOL REACTION PRODUCT DIBUTYL PHTHALATE | |
| 2 1 112243 | ANCHORFAST HARDENER TRIETHYLENETETRAMINE, TETA ALIPHATIC AMINE ADDUCT | X |
| 25068386 84742 13463677 1318841 1317653 7631867 26142303 15625895 | ANCHORFAST RESIN EPOXY RESIN DIGLYCIDYL ETHER OF BISPHENOL A DIBUTYL PHTHALATE, DBP TITANIUM DIOXIDE MICA SILICEOUS MUSCOVITE LIMESTONE SILICA SILICON DIOXIDE EPICHLORHYDRIN POLYGLYCOL REACTION PRODUCT MULTIFUNCTIONAL ACRYLATE MONOMER | X |
| 108952 112243 32610778 | SUPER CERAMIC REPAIR PUTTY HARDENER PHENOL TRIETHYLENETETRAMINE FORMALDEHYDE POLYMER WITH PHENOL & TETA | X |
| 1344281 25068386 | SUPER CERAMIC REPAIR PUTTY RESIN ALUMINUM OXIDE BISPHENOL A DIGLYCIDYL | X |

Small and Small 8 gal - 1 gallon bottles.

Normal Shale =

Normal Shale =

lined =
COX
NOX
NH3

ETHER RESIN
CHOCKRETE
PORTLAND CEMENT
SILICA CRYSTALLINE QUARTZ

CORROSIVE CHOCKFAST BLACK HARDENER
111400 DIETHYLENETRIAMINE
112243 TRIETHYLENETETRAMINE
80057 BISPHENOL A

<30
>50
<30

6
7
8

CHOCKFAST BLACK RESIN
CARBON BLACK
SECRET ALICYCLIC GLYCIDYL ETHER
14808607 CRYSTALLINE SILICA
25068386 BISPHENOL A DIGLYCIDYL
ETHER RESIN
SECRET CYCLIC ESTER

CHOCKFAST BLUE HARDENER
112243 TRIETHYLENETETRAMINE
112572 TETRAETHYLENEPENTAMINE
80057 BISPHENOL A
* AMIDOAMINE #1
* AMIDOAMINE #2
* AMIDOAMINE #3

10-15
<4
<10
>10
>10
>10

9
10

CHOCKFAST BLUE RESIN
141228730 1,4-CYCLOHEXANEDIMETHANO
DIGLYCIDYL ETHER
14808607 CRYSTALLINE SILICA
25068386 BISPHENOL A DIGLYCIDYL
ETHER RESIN

CORROSIVE CHOCKFAST GRAY HARDENER
111400 DIETHYLENETRIAMINE
112243 TRIETHYLENETETRAMINE
80057 BISPHENOL A

<30
>50
<30

CHOCKFAST GRAY RESIN
1333864 CARBON BLACK
13463677 TITANIUM DIOXIDE
SECRET ALICYCLIC GLYCIDYL ETHER
14807966 MAGNESIUM SILICATE HYDRATE
14808607 CRYSTALLINE SILICA
25068386 BISPHENOL A DIGLYCIDYL
ETHER RESIN
SECRET CYCLIC ESTER

CHOCKFAST ORANGE RESIN
14808607 CRYSTALLINE SILICA
25068386 BISPHENOL A DIGLYCIDYL
ETHER RESIN
SECRET EPOXY PHENOL NOVALAC

All

mostly aggregate bags

SECRET

RESIN
INERT FILLER

✓ CORROSIVE
112243

CHOCKFAST ORANGE HARDENER >80
TRIETHYLENETETRAMINE

✓ 112243
✓ 112572
*
*

CHOCKFAST RED HARDENER
TRIETHYLENETETRAMINE
TETRAETHYLENEPENTAMINE
AMIDOAMINE
AMIDOAMINE
AMIDOAMINE

<1
<15
>10
>10
>10

1330207
25068386

CHOCKFAST RED RESIN
XYLENE
BISPHENOL A DIGLYCIDYL
ETHER RESIN

14808607
65997173
70657704

CHOCKFAST RED AGGREGATE
CRYSTALLINE SILICA
FIBROUS GLASS
2-METHOXY-1-PROPANOL
ACETATE

*
*

SATURATED HYDROCARBONS
POLYETHER MODIFIED METHYLALIKYL
POLYSILOXANE COPOLYMER

✓ CORROSIVE
✓ 112243

CHOCKFAST RED SG HARDENER >75
TRIETHYLENETETRAMINE

SECRET
25068386

CHOCKFAST RED SG RESIN
TRADE SECRET DILUENT
BISPHENOL A DIGLYCIDYL
ETHER RESIN

SECRET

TRADE SECRET DILUENT

14808607
65997173
70657704

CHOCKFAST RED SG AGGREGATE
CRYSTALLINE SILICA
FIBROUS GLASS
2-METHOXY-1-PROPANOL
ACETATE

*
*

SATURATED HYDROCARBONS
POLYETHER MODIFIED METHYLALIKYL
POLYSILOXANE COPOLYMER

112572
90772

CONCRETE ADHESIVE HARDENER
TETRAETHYLENEPENTAMINE
AMIDOAMINE

25068386

CONCRETE ADHESIVE RESIN
BISPHENOL A DIGLYCIDYL
ETHER RESIN

DURASEAL 6000 HARDENER

111400
80057

DIETHYLENE TRIAMINE (DETA)
4,4'-(1 METHYLETHYLIDENE)
BISPHENOL A

*

MODIFIED ALIPHATIC POLYAMINE

67650

ISOPROPYL ALCOHOL

X

108101

METHYL ISOBUTYL KETONE

X

108883

TOLUENE

EPCOM CARTRIDGE E-6 RESIN
EPOXY RESIN DIGLYCIDYL ETHER
BISPHENOL A
AMORPHOUS SILICA SILICON
DIOXIDE

X

TALC MAGNESIUM SILISCATE-
HYDRATE WITHOUT ASBESTOS
TITANIUM DIOXIDE
GLASS OXIDE

EPCOM CARTRIDGE E-6 HARDENER
ALIPHATIC MERCAPTAN
POLYMERCAPTAN
AMORPHOUS SILICA SILICON
DIOXIDE

X

TALC MAGNESIUM SILICATE-HYDRATE
WITHOUT ASBESTOS
GLASS OXIDE
CERAMIC POWDER, ALUMINUM OXIDE

CORROSIVE

EXPANSION JOINT COMPOUND HARDENER
ALL COLORS

X

140318

AMINOETHYLPIPERAZINE

90722

2,4,6,-TRIS(DIMETHYLAMINOMETHYL)
PHENOL

EXPANSION JOINT COMPOUND RESIN
ALL COLORS

X

25068386

BISPHENOL A DIGLYCIDYL ETHER
RESIN

✓ 84852153

4-NONYL-PHENOL

SECRET

CYCLIC ESTER

*

BLOCKED POLYISOCYANATE

CORROSIVE

ACID RESISTANT TROWELABLE
FLOOR RESURFACER HARDENER

X

2/ 100516

BENZYL ALCOHOL

2855132

ISOPHORONE DIAMINE

69727

SALICYLIC ACID

45-50
>9
<15

X

ACID RESISTANT TROWELABLE
FLOOR RESURFACER RESIN
EPOXY NOVALAC RESIN

X

SECRET

NON MELT GREASE
MINERAL OIL

*

X

✓ 108952 PHILLYBOND #6 HARDENER
 112243 PHENOL
 1333864 TRIETHYLENETETRAMINE
 14808607 CARBON BLACK
 ✓ 32610776 CRYSTALLINE SILICA
 FORMALDEHYDE POLYMER WITH
 PHENOL & TETA

25068386 PHILLYBOND #6 RESIN
 CRYSTALLINE SILICA
 BISPHENOL A DIGLYCIDYL
 ETHER RESIN

25068386 PHILLYBOND TA-30 RESIN
 BISPHENOL A DIGLYCIDYL
 ETHER RESIN
 84742 DIBUTYL PHTHALATE (DBP)

* PHILLYBOND TA-30 HARDENER
 * EPOXY RESIN HARDENER-FATTY
 * AMIDAMINE RESIN
 * POLYAMINE ADDUCT
 111400 MODIFIED POLYAMINE
 DIETHYLENE TRIAMINE

25068386 PHILLYCLAD 33 PRIMER RESIN
 BISPHENOL A DIGLYCIDYL
 ETHER RESIN
 PROP REACTIVE DILUENT

PROP PHILLYCLAD 33 PRIMER HARDENER
 MODIFIED CYCLOCLIPHTIC
 POLYAMINE
 100516 BENZYL ALCOHOL
 108952 PHENOL
 111400 DIETHYLENE TRIAMINE
 PROP MODIFIED ALIPHATIC POLYAMINE

124153348 PHILLYCLAD 200 DECK GRAY
 AGGREGATE
 IRON ALUMINUM SILICATE
 21645512 CARBON BLACK
 471341 ALUMINUM TRIHYDRATE
 CALCIUM CARBONATE

1326536 PHILLYCLAD 200 GREEN AGGREGATE
 13463677 PHTHALOCYANINE GREEN
 471341 TITANIUM DIOXIDE
 6358312 CALCIUM CARBONATE
 65997173 C.I. PIGMENT YELLOW 74
 GLASS OXIDE

FLAMMABLE PHILLYCLAD 200 RESIN

*Acrylate, butyl nitrate
 chemical has some fuel*

11 *SLIO*

-K² H²O²

X
 X

X

X

X

X

X

X

X

X

X

| | | | |
|----------|-----------------------------------|---|---|
| 100414 | ETHYL BENZENE | | |
| 108883 | TOLUENE | | |
| 1330207 | XYLENE | | |
| 26471625 | TOLUENE-1,3-DIISOCYANATE | | |
| * | URETHANE POLYMER | | |
| | PHILLYCLAD 550 SELF LEVELLING | | X |
| | EPOXY HARDENER (ALL COLORS) | | |
| ✓ * | MODIFIED CYCLOALIPHATIC POLYAMINE | | |
| 100516 | BENZYL | | |
| 108952 | PHENOL | | |
| | PHILLYCLAD 550 SELF-LEVELLING | | X |
| | EPOXY RESIN (ALL COLORS) | | |
| 2508386 | BISPHENOL A DIGLYCIDYL | | |
| | ETHER RESIN | | |
| PROP | REACTIVE DILUENT | | |
| | PHILLYCLAD 550 HIGH BUILD | | X |
| | ADDITIVE | | |
| 14808607 | CRYSTALLINE SILICA | | |
| 14807966 | MAGNESIUM SILICATE HYDRATE (TALC) | | X |
| | PHILLYCLAD ANTISKID 1000 | | X |
| 9003070 | POLYPROPYLENE | | |
| | PHILLYCLAD 1000 CLEAR HARDENER | | X |
| 1330207 | XYLENE | X | |
| PROP | EPOXY RESIN HARDENER | | |
| | POLYAMIDE RESIN | | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL | | |
| | PHILLYCLAD 1000 CLEAR RESIN | | X |
| 25068386 | BISPHENOL A DIGLYCIDYL | | |
| | ETHER RESIN | | |
| 108101 | METHYL ISOBUTYL KETONE | | |
| 1330207 | XYLENE | X | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL | | |
| | ETHER | | |
| | PHILLYCLAD 1000 SERIES HARDENER | | X |
| 1330207 | XYLENE | X | |
| 25068386 | BISPHENOL A DIGLYCIDYL | | |
| | ETHER RESIN | | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL | | |
| | ETHER | | |
| 64742956 | AROMATIC NAPHTHA | | |
| | PHILLYCLAD 1001 WHITE RESIN | | X |
| * | POLYAMIDE RESIN | | |
| 14807766 | AROMATIC NAPHTHA | | |
| 1330207 | XYLENE | X | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL | | |
| | ETHER | | |

| | | | |
|-----------|-----------------------------------|---|---|
| * | PHILLYCLAD 1003 MED GREEN RESIN | | |
| 64742956 | POLYAMIDE RESIN | | X |
| 1330207 | AROMATIC NAPHTHA | | |
| | XYLENE | | |
| 13463767 | BARIUM SULFATE | X | |
| | PHILLYCLAD 1013 TILE RED RESIN | | |
| | 1013 HAZE GRAY RESIN | | |
| * | POLYAMIDE RESIN | | |
| 64742956 | AROMATIC NAPHTHA | | |
| 1330207 | XYLENE | X | |
| | PHILLYCLAD 1776 RESIN | | |
| 25068386 | BISPHENOL A DIGLYCIDYL | | X |
| | ETHER RESIN | | |
| 84742 | DIBUTYL PHTHALATE | | |
| FLAMMABLE | PHILLYCLAD 2001 DECK GRAY RESIN | X | X |
| | HAZE GRAY | | |
| | RED | | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL ETHER | | |
| 108101 | METHYL ISOBUTYL KETONE | | |
| 1330207 | XYLENE | | |
| 1333864 | CARBON BLACK | | |
| 14808607 | CRYSTALLINE SILICA | | X |
| 25036253 | POLYMERS OF EPOXY RESIN | | X |
| | BISPHENOL A | | |
| 25068386 | BISPHENOL A DIGLYCIDYL | | |
| | ETHER RESIN | | |
| 25064144 | PHENOL, POLMER W/FORMALDEHYDE | | |
| | GLYCIDYL ETHER | | |
| 4074883 | ACRYLIC ACID, 2-ETHOXYETHANOL | | |
| | DIESTER | | |
| 64742956 | LIGHT AROMATIC NAPHTHA | | |
| 95636 | 1,2,4-TRIMETHYLBENZENE | | |
| * | BLOCKED POLYISOCYANATE | | |
| FLAMMABLE | PHILLYCLAD 2001 HARDENER | | |
| 100516 | BENZYL ALCOHOL | | X |
| 107982 | PROPYLENE GLYCOL MONOMETHYL | | |
| | ETHER | | |
| 108101 | METHYL ISOBUTYL KETONE | | |
| 1477550 | META-XYLENEDIAMINE | | |
| 14808607 | CRYSTALLINE SILICA | | |
| 64742956 | LIGHT AROMATIC NAPHTHA | | X |
| 95636 | 1,2,4-TRIMETHYLBENZENE | | |
| * | ALKYLAMINE | | |
| * | POLYAMIDE | | |
| * | ALIPHATIC AMINE | | |
| | PHILLYMASTIC 1762 | | |
| | PHILLYSEAL R RESIN | | |
| 25068386 | BISPHENOL A DIGLYCIDYL | | X |

| | | | |
|-----------|---------------------------------|---|---|
| 68609972 | ETHER RESIN | | |
| * | ALIPHATIC GLYCIDYL ETHER | | |
| | ALKYL PHENOL BLOCKED POLY- | | |
| | ISOCYANATE | | |
| 140318 | PHILLYSEAL R HARDENER | | X |
| 25154523 | N-AMINOETHYPIPERAZINE (AEP) | | |
| 84742 | NONLPHENOL | | |
| | DIBUTYL PHTHALTE | | |
| FLAMMABLE | PRT SOLVENT # 59 | X | X |
| 107982 | PROPYLENE GLYCOL | | |
| | MONOMETHYL ETHER | | |
| FLAMMABLE | PRT-60 SOLVENT | X | X |
| 108101 | METHYL ISOBUTYL KETONE | | |
| 108823 | TOLUENE | | |
| FLAMMABLE | PRT-61 SOLVENT (1 & 5 GALLON) | X | X |
| 100414 | ETHYL BENZENE | | |
| 107982 | PROPYLENE GLYCOL | | |
| | MONOMETHYL ETHER | | |
| 1330207 | XYLENE | | |
| 1717006 | PR 225 MOLD RELEASE RESIN | | X |
| * | 1,1 DICHLORO 1-FLUROETHANE | | |
| | OREGANO MODIFIED SILANE | | |
| 1333864 | REPAIR COMPOUND RESIN | | X |
| 14228730 | CARBON BLACK | | X |
| | 1,4-CYCLOHEXANEDIMETHANOL | | |
| | DIGLYCIDYL | | |
| 14808607 | CRYSTALLINE SILICA | | |
| 25068386 | BISPHENOL A DIGLYCIDYL | | |
| | ETHER RESIN | | |
| ✓ 112243 | REPAIR COMPOUND HARDENER | | X |
| 112572 | TRIETHYLENETETRAMINE | | |
| 14808607 | TETRAETHYLENEPENTAMINE | | |
| 32610778 | CRYSTALLINE SILICA | | X |
| | FORMALDEHYDE POLYMER | | |
| | W/PHENOL & TETA | | |
| 68443083 | AMIDOAMINE | | |
| FLAMMABLE | RUST INHIBITIVE PRIMER HS RESIN | X | |
| 107982 | PROPYLENE GLYCOL | | |
| | MONOMETHYL ETHER | | |
| 108101 | METHYL ISOBUTYL KETONE | | |
| 1330207 | XYLENE | | |
| 1333864 | CARBON BLACK | | X |
| 14808607 | CRYSTALLINE SILICA | | X |
| 25036253 | POLYMERS OF EPOXY RESIN | | |
| | & BISPHENOL A | | |
| 25068386 | BISPHENOL A DIGLYCIDYL | | |

| | | | |
|-----------|---|---|---|
| 25064144 | ETHER RESIN | | |
| 4074588 | PHENOL POLYMER W/FORMALDEHYDE GLYCIDYL ETHER | | |
| 64742956 | ACRYLIC ACID, 2-ETHOXYETHANOL DIESTER | | |
| 95636 | LIGHT AROMATIC NAPHTHA 1,2,4-TRIMETHYLBENZENE | | |
| * | BLOCKED POLYISOCYANATE | | |
| FLAMMABLE | RUST INHIBITIVE PRIMER HS HARDENER | X | X |
| 100516 | BENZYL ALCOHOL | | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL ETHER | | |
| 108101 | METHYL ISOBUTYL KETONE | | |
| 1477550 | META-XYLENEDIAMINE | | |
| 14808607 | CRYSTALLINE SILICA | | |
| 64742956 | LIGHT AROMATIC NAPHTHA 1,2,4-TRIMETHYLBENZENE | | X |
| 95636 | ALKYLAMINE | | |
| * | POLYAMIDE | | |
| * | ALIPHATIC AMINE | | |
| | STRIP CAULKING | | X |
| 25068386 | SUPER ALLOY TITANIUM PUTTY RESIN BISPHENOL A DIGLYCIDYL ETHER RESIN | | X |
| PROP | SUPER ALLOY TITANIUM PUTTY HARDENER NANNICH-BASE ADDUCT OF TRIETHYLENE TETRAMINE & PH | | X |
| PROP | POLYAMINE CURING AGENT | ? | |
| 112243 | TRIETHYLENE TETRAMINE | | |
| 108952 | PHENOL | | |
| 108952 | SUPER CERAMIC REPAIR PUTTY HARDENER | ? | X |
| 112243 | PHENOL | | |
| 32610778 | TRIETHYLENETETRAMINE FORMALDEHYDE POLYMER W/PHENOL & TETA | | |
| 1344281 | SUPER CERAMIC REPAIR PUTTY RESIN ALUMINUM OXIDE | | X |
| 25068386 | BISPHENOL A DIGLYCIDYL ETHER RESIN | | |
| COMBUSTBL | SUPER CERAMIC REPAIR LIQUID COLOR ADDITIVE | X | X |
| 123422 | DIACETONE ALCOHOL | | |
| 1333854 | CARSON BLACK | | X |
| 1344281 | SUPER CERAMIC REPAIR LIQUID RESIN ALUMINUM OXIDE | | X |

| | | | |
|--|---|---|---|
| 14228730 | 1,4-CYCLOHEXANEDIMETHANOL DIGLYCIDYL ETHER | | |
| 14808607 | CRYSTALLINE SILICA | | |
| 25068386 | BISPHENOL A DIGLYCIDYL ETHER RESIN | | |
| CORROSIVE SUPER CERAMIC REPAIR LIQUID HARDENER | | | |
| 111400 | DIETHYLENETRIAMINE | | X |
| 67630 | ISOPROPANOL | | |
| 80057 | BISPHENOL A | | |
| * | MODIFIED ALIPHATIC POLYAMINE | | |
| FLAMMABLE TROWELABLE FLOOR RESURFACER PRIMER HARDENER | | | |
| 100414 | ETHYL BENZENE | X | X |
| 100516 | BENZYL ALCOHOL | | |
| 107982 | PROPYLENE GLYCOL MONOMETHYL ETHER | | |
| 108952 | PHENOL | | |
| 124094 | 1,6-DIAMINOHEXANE | | |
| 1330207 | XYLENE | | |
| 68479801 | REACTION PRODUCT OF AMINE. PHENOL & FORMALDEHYDE | | |
| 694837 | 1,2-CYCLOHEXANEDIAMINE | | |
| FLAMMABLE TROWELABLE FLOOR RESURFACER PRIMER RESIN | | | |
| 100414 | ETHYL BENZENE | X | X |
| 1330207 | XYLENE | | |
| 25068386 | BISPHENOL A DIGLYCIDYL ETHER RESIN | | |
| 68061845 | ALKYL GLYCIDYL ETHER | | |
| TROWELABLE FLOOR RESURFACER RESIN | | | |
| SECRET | ALICYCLIC GLYCIDYL ETHER | | X |
| SECRET | ALIPHATIC GLYCIDYL ETHER | | |
| 25068386 | BISPHENOL A DIGLYCIDYL ETHER RESIN | | |
| TROWELABLE FLOOR RESURFACER HARDENER | | | |
| 100516 | BENZYL ALCOHOL | | X |
| 108952 | PHENOL | | |
| 112243 | TRIETHYLENETETRAMINE | | |
| 124094 | 1,6-DIAMINOHEXANE | | |
| 68479801 | REACTION PRODUCT OF AMINE PHENOL & FORMALDEHYDE | | |
| 694837 | 1,2-CYCLOHEXANEDIAMINE | | |
| TROWELABLE FLOOR RESURFACER CEMENT AGGREGATE | | | |
| 14808607 | CRYSTALLINE SILICA | | X |

APPENDIX 3

ACTUAL MCC WAREHOUSE INVENTORY THREE MAIN CLIENTS

BruggemannChemical U. S., Inc.
Tel: 1-610-353-9852
Fax: 1-610-353-9853



BruggemannChemicalUS
The USA Subsidiary of the L.Bruggemann KG Germany

FACSIMILE COVER PAGE

| | |
|--|----------------------------|
| To: David Burke | From: Ed Mc Dade |
| Fax #: 16108326133 | Fax #: 1-610-353-9853 |
| Company: PA - DEP | Tel #: 1-610-353-9852 |
| Subject: Bridgeport Fire - Bruggemann Chemical Inventory @ MCC | |
| Sent: 5/22/2001 at 10:57:28 AM | Pages: 1 (including cover) |

MESSAGE:

Dear Dave,

Follows are:

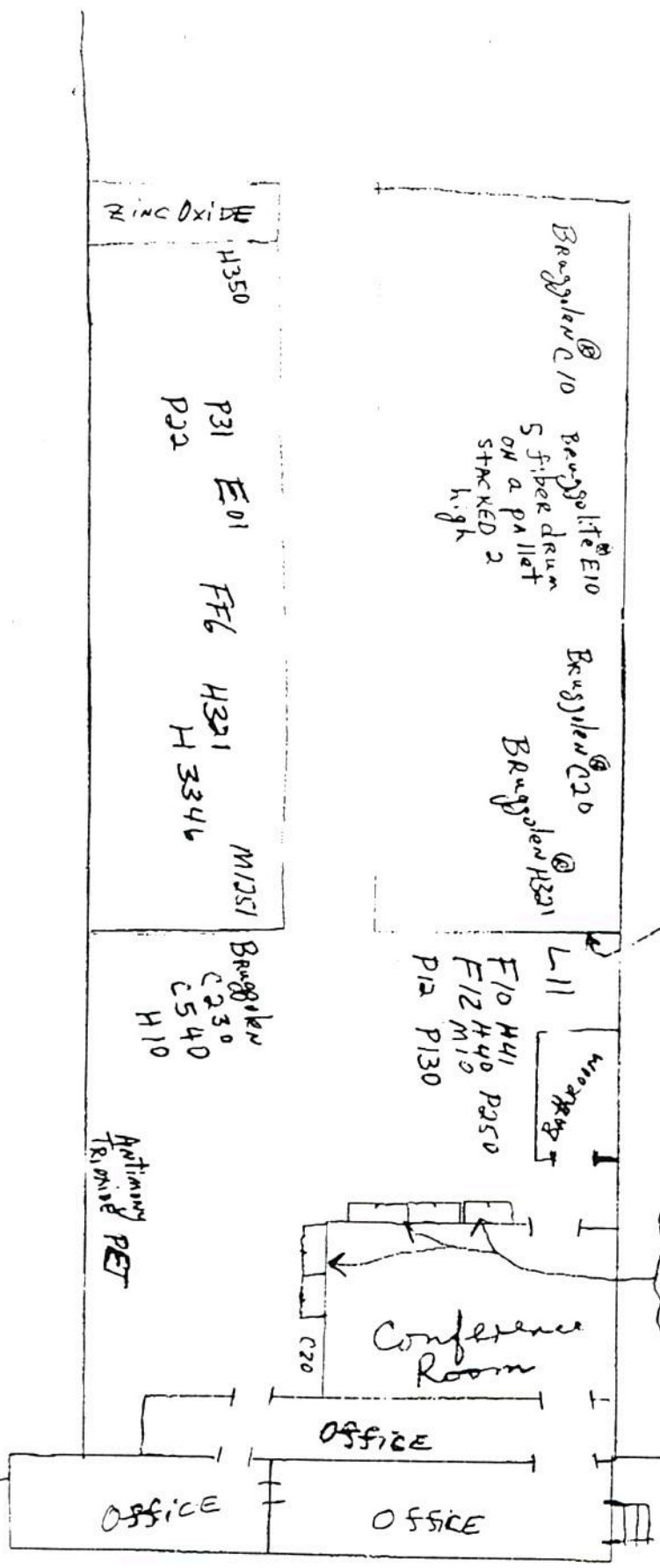
- 1) A list of the BruggemannChemical inventory that was lost at MCC. This list shows - Item ID, Item Description (basically tradenames), the Count on 5/15 as of the fire, Net Weight (lbs.) of each container, Total Net Weight (lbs.), and the Packaging for each product.
- 2) A drawing of the approximate location of most of the inventory. This is a rough guess from my memory, and Marty Helverson could probably give a better approximation of location since I am not always aware of where some products were stored.

If you need any further help, please call me at 610-353-9852.

Regards,
Ed Mc Dade
BruggemannChemical U.S., Inc.

BruggemannChemical US, Inc.
Inventory Destroyed at MCC 5/15/01

| Item ID | Item Description | Count @ 5/15/2001 | Weight lbs | Total Weight, lbs | Packaging |
|---------------------|--------------------------------|----------------------|---------------|----------------------|----------------------|
| Ant Trioxide -- MCC | Antimony Trioxide | 38.0 | 55.0 | 2,090.0 | paper bags |
| M-C10P | Bruggolen C10 (Plastic drum) | 447.0 | 110.0 | 49,170.0 | plastic drums |
| M-C10 | Bruggolen C10 (Metal drum) | 9.0 | 110.0 | 990.0 | iron drums |
| M-C20 | Bruggolen C20 (Metal drum) | 28.0 | 110.0 | 3,080.0 | iron drums |
| M-C20P | Bruggolen C20P (Plastic drum) | 221.0 | 154.0 | 34,034.0 | plastic drums |
| M-C20PA | Bruggolen C20PA | 2.0 | 110.0 | 220.0 | plastic drums |
| M-C230 | Bruggolen C230 | 41.0 | 110.0 | 4,510.0 | iron & plastic drums |
| M-CS40 | Bruggolen C540 | 36.0 | 110.0 | 3,960.0 | iron & plastic drums |
| M-F10 | Bruggolen F10 | 1.0 | 110.0 | 110.0 | iron drums |
| M-F12 | Bruggolen F12 | 9.0 | 110.0 | 990.0 | iron drums |
| M-H10 | Bruggolen H10 | 44.0 | 110.0 | 4,840.0 | plastic & iron drums |
| M-H11 | Bruggolen H11 | 4.0 | 110.0 | 440.0 | plastic drums |
| M-H160 | Bruggolen H160 | 5.0 | 110.0 | 550.0 | iron drums |
| M-H161 | Bruggolen H161 | 6.0 | 110.0 | 660.0 | plastic & iron drums |
| M-H163 | Bruggolen H163 | 5.0 | 110.0 | 550.0 | plastic drums |
| M-H164 | Bruggolen H164 | 1.0 | 110.0 | 110.0 | iron drums |
| M-H175 | Bruggolen H175 | 2.0 | 110.0 | 220.0 | plastic & iron drums |
| M-H20 | Bruggolen H20 | 3.0 | 110.0 | 330.0 | plastic drums |
| M-H320 | Bruggolen H320 | 7.0 | 110.0 | 770.0 | iron drums |
| M-H321 | Bruggolen H321 | 106.0 | 220.0 | 23,320.0 | plastic drums |
| M-H322 | Bruggolen H322 | 1.0 | 110.0 | 110.0 | iron drums |
| M-H323 | Bruggolen H323 | 5.0 | 110.0 | 550.0 | iron drums |
| M-H3346 | Bruggolen H3346 | 26.0 | 220.0 | 5,720.0 | plastic & iron drums |
| M-H350 | Bruggolen H350 | 5.0 | 110.0 | 550.0 | iron drums |
| M-H40 | Bruggolen H40 | 1.0 | 88.0 | 88.0 | fiber drums |
| M-H41 | Bruggolen H41 | 1.0 | 110.0 | 110.0 | fiber drums |
| M-L11 | Bruggolen L11 | 8.0 | 110.0 | 880.0 | iron drums |
| M-L12 | Bruggolen L12 | 5.0 | 110.0 | 550.0 | plastic drums |
| M-M10 | Bruggolen M10 | 10.0 | 110.0 | 1,100.0 | iron drums |
| M-M12 | Bruggolen M12 | 2.0 | 110.0 | 220.0 | iron drums |
| M-M1251 | Bruggolen M1251 | 4.0 | 110.0 | 440.0 | plastic drums |
| M-P12 | Bruggolen P12 | 5.0 | 110.0 | 550.0 | plastic & iron drums |
| M-P130 | Bruggolen P130 | 6.0 | 110.0 | 660.0 | fiber drums |
| M-P22 | Bruggolen P22 50 kg | 19.0 | 110.0 | 2,090.0 | plastic drums |
| M-P22 | Bruggolen P22 40 kg | 6.0 | 88.0 | 528.0 | plastic drums |
| M-P250 | Bruggolen P250 | 7.0 | 110.0 | 770.0 | plastic drums |
| M-P31 | Bruggolen P31 | 14.0 | 154.0 | 2,156.0 | plastic drums |
| E01G -- MCC | Bruggolite E01 Granules | 232.0 | 250.0 | 58,000.0 | fiber drums |
| E01P -- MCC | Bruggolite E01 Powder | 250.0 | 250.0 | 62,500.0 | fiber drums |
| M-FF6 (S-kg) | Bruggolite FF6 (15kg / 33 lb) | 4.0 | 33.0 | 132.0 | iron kegs |
| M-FF6 (L-kg) | Bruggolite FF6 (80kg / 176 lb) | 26.0 | 176.0 | 4,576.0 | fiber drums |
| M-PET 1.10 | PET 1.10 | 6.0 | 55.0 | 330.0 | plastic bags |
| M-PET 1.10 - 2 | PET 1.10-2 | 0.0 | 1980.0 | 0.0 | fiber board box |
| M-ZCARB RAC | Zinc Carbonate RAC | 0.0 | 55.0 | 0.0 | paper bags |
| M-ZOX AC100 | Zinc Oxide AC100 | 76.0 | 55.0 | 4,180.0 | paper bags |
| M-ZOX AC 45 | Zinc Oxide AC45 | 38.0 | 55.0 | 2,090.0 | paper bags |
| M-ZOX RAC 1 | Zinc Oxide RAC 1 | 148.0 | 55.0 | 8,140.0 | paper bags |
| NF PULVER | NF Pulver | 3.0 | 55.0 | 165.0 | iron kegs |
| CAPROLACTAM | Caprolactam | 1.0 | 55.0 | 55.0 | plastic bags |



Plastic Film Hanging
From Roof

Steel
Cabinets
with
1 qt + 1 gal.
Samples



P.O. Box 17600 • Pittsburgh, Pennsylvania 15235 • 412-829-2300 • 1-800-937-3877 • Fax 412-829-7680

May 17, 2001

Mr. Mike Towle
Federal On Scene Coordinator
1650 Arch Street
Phildelphia. PA 19103

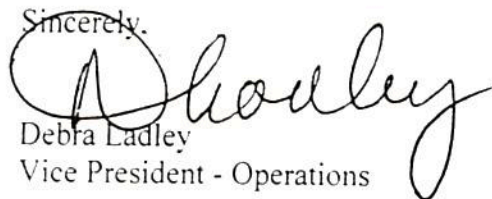
Dear Mike,

Enclosed you will find the documentation that you requested per our phone conversation on May 17, 2001. We are supplying you with copies of the Material Safety Data Sheets for each product that Durr Marketing Associates, Inc. had in stock on May 15, 2001 at MCC Warehouse at the time of the fire, along with a corresponding stock status report.

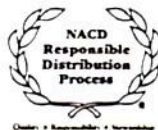
Enclosed is a spreadsheet, which identifies the material that could qualify as a SARA 304 CERCLA release, depending on the condition of the material, which is unknown to us at this time.

Should you require additional information, please do not hesitate to contact me.

Sincerely,


Debra Ladley
Vice President - Operations

Cc: David Durr – President
Curt Soergel – Vice President – Product Management
Megan Beam – Quality Manager



www.durrrmarketing.com

*note: MSDS now
located in EPA file*

Contact information for Dorr Marketing

office - 412-829-2300
or 800-937-3877
fax - 412-829-7630

Debra Ladley - V.P. - Operations

office - 412-825-7505

home - (b) (6)

Kurt Soergel - V.P. Product Mgmt

home - (b) (6)

Ms. Ladley requested that she be notified when the product at MCC is going to be stabilized, or moved. She will travel to Bridgeport to assist the operation.

(D. Burke - DEP)

**ITEMS AT MCC THAT EXCEED CERCLA RQ
STOCK IN MCC WAREHOUSE AS OF 5/15/01**

| ITEM | CAS # | STOCK AS OF 5/15/01 | % OF CAS # IN PROD | QTY OF POSS. RELEASE | RQ |
|--|---------------------|---------------------|--------------------|----------------------|-----|
| BUC 1025TT | 91203 - NAPHTHALENE | 2,200.00 | 5 | 110.00 | 100 |
| TOTAL AMOUNT OF POSSIBLE NAPHTHALENE RELEASE = 110 LBS. | | | | | |
| DCC 1004 | 7439921 - LEAD | 8,250.00 | 66 | 5,445.00 | 10 |
| DCC 1606KG | 7439921 - LEAD | 3,031.33 | 66 | 2,000.70 | 10 |
| DCC 1606SI | 7439921 - LEAD | 2,000.00 | 66 | 1,320.00 | 10 |
| DCC 1622 | 7439921 - LEAD | 3,250.00 | 66 | 2,145.00 | 10 |
| DCC 1623 | 7439921 - LEAD | 3,200.00 | 66 | 2,112.00 | 10 |
| DCO KO786D | 7439921 - LEAD | 4,000.00 | 53 | 2,120.00 | 10 |
| DCO KO789D | 7439921 - LEAD | 2,100.00 | 53 | 1,113.00 | 10 |
| DCO KO906D | 7439921 - LEAD | 3,350.00 | 53 | 1,775.50 | 10 |
| DCO KO909D | 7439921 - LEAD | 400.00 | 53 | 212.00 | 10 |
| DCO KY781D | 7439921 - LEAD | 350.00 | 53 | 185.50 | 10 |
| DCO KY788D | 7439921 - LEAD | 2,000.00 | 53 | 1,060.00 | 10 |
| DCO KY795D | 7439921 - LEAD | 2,400.00 | 53 | 1,272.00 | 10 |
| DCO KY907D | 7439921 - LEAD | 3,750.00 | 53 | 1,987.50 | 10 |
| DCO KY908D | 7439921 - LEAD | 2,400.00 | 53 | 1,272.00 | 10 |
| DCO YE934LD | 7439921 - LEAD | 6,550.00 | 66 | 4,323.00 | 10 |
| DCO YE937LD | 7439921 - LEAD | 5,050.00 | 66 | 3,333.00 | 10 |
| DCO YE941LD | 7439921 - LEAD | 2,550.00 | 66 | 1,683.00 | 10 |
| DCO YE998LD | 7439921 - LEAD | 3,850.00 | 66 | 2,541.00 | 10 |
| DCO Y969DUP | 7439921 - LEAD | 12,100.00 | 66 | 7,986.00 | 10 |
| DCO Y969LD | 7439921 - LEAD | 12,300.00 | 66 | 8,118.00 | 10 |
| TOTAL AMOUNT OF POSSIBLE LEAD RELEASE = 52,004.20 LBS. | | | | | |

** QUANTITY OF POSSIBLE RELEASE BASED SOLELY IF THE MATERIAL IS TOTALLY CONSUMED IN THE FIRE

DURR MARKETING

STOCK

| ***** | | | | ON |
|-------|-------|------------|--------------------------------|----------|
| CO# | N/STK | ITEM# | DESCRIPTION | HAND |
| ***** | | | | |
| 01 | Y | DCC1245 | MC DIARYLIDE YELLOW (25#) | .00 |
| 01 | Y | DCC1363 | MC CALCIUM AZO YELLOW (25#) | .00 |
| 01 | N | DCC1606KG | MC MOLY ORANGE (55.12#/BG) | 3031.33 |
| 01 | N | DCC1606SI | MC *MOLY ORANGE STIR-IN 50# | 2000.00 |
| 01 | Y | DCC1607 | MC *MOLY ORANGE BLUE SH (50) | .00 |
| 01 | Y | DCC1612 | MC MOLY ORANGE (50#) | .00 |
| 01 | Y | DCC1614 | MC *MOLY ORANGE BLUEST SH 50 | .00 |
| 01 | Y | DCC1622 | MC MOLY ORANGE (50#) | 3250.00 |
| 01 | Y | DCC1623 | MC *MOLY ORANGE REGULAR (50) | 3200.00 |
| 01 | Y | DCC1802 | MC* DIARYLIDE ORANGE (25#) | 500.00 |
| | | DCC1802 | RT DIARYLIDE ORANGE (25#) | 25.00 |
| 01 | Y | DCC2222 | MC TOLUIDINE RED E.D. (25#) | 300.00 |
| 01 | Y | DCC2254 | MC TOLUIDINE RED E.D. (25#/BG) | 1025.00 |
| 01 | Y | DCC2304 | MC CALCIUM LITHOL RED (50#) | .00 |
| 01 | Y | DCC2519 | MC RED LAKE C (50 LBS) | .00 |
| 01 | Y | DCC2728 | MC LITHOL RUBINE (25#/BAG) | .00 |
| 01 | Y | DCC5035 | MC LEMON CHR YEL (INK AP) 20K | .00 |
| 01 | Y | DCC6005 | MC DCC 6005 BON MAROON (25#) | 375.00 |
| 01 | Y | DCC7074 | MC HANSA YELLOW (50#) | 1400.00 |
| 01 | Y | DCC7151 | MC BENZIMIDAZOLONE YELLO 25# | .00 |
| 01 | N | DCC7170 | MC NAPHTHOL RED (25 LB/BAG) | .00 |
| | | | ** PRINCIPAL TOTAL | 23531.33 |
| 01 | Y | DCOKO786D | MC MOLYBDATE ORANGE (50#) | 4000.00 |
| 01 | Y | DCOKO789D | MC MOLYBDATE ORANGE (50#) | 2100.00 |
| 01 | N | DCOKO906D | MC MOLYBDATE ORANGE (50#) | 3350.00 |
| 01 | Y | DCOKO909D | MC MOLYBDATE ORANGE (50#) | 400.00 |
| 01 | Y | DCOKY781D | MC LEMON CHROME YELLOW (50#) | 350.00 |
| 01 | Y | DCOKY787D | MC MED. CHROME YELLOW (50#) | .00 |
| 01 | Y | DCOKY788D | MC LEMON CHROME YELLOW (50#) | 2000.00 |
| 01 | Y | DCOKY791D | MC PRIMROSE CHROME YELLOW 50# | .00 |
| 01 | Y | DCOKY795D | MC MED. CHROME YELLOW (50#) | 2400.00 |
| 01 | N | DCOKY907D | MC MED. CHROME YELLOW (50#) | 3750.00 |
| 01 | N | DCOKY908D | MC LEMON CHROME YELLOW (50#) | 2400.00 |
| 01 | N | DCOYE934LD | MC LEMON CHROME YELLOW (50#) | 6550.00 |
| 01 | N | DCOYE937LD | MC MOLYBDATE ORANGE (50#) | 5050.00 |
| 01 | N | DCOYE941LD | MC MOLYBDATE ORANGE (50# BAG) | 2550.00 |
| 01 | N | DCOYE998LD | MC MOLY ORANGE (50#) | 3850.00 |
| 01 | Y | DCOY933LD | MC LEMON CHROME YELLOW 50# | .00 |
| 01 | Y | DCOY969DUP | MC MED. CHROME YELLOW (50#) | 12100.00 |
| 01 | N | DCOY969LD | MC MED. CHROME YELLOW (50#) | 12300.00 |
| | | | ** PRINCIPAL TOTAL | 63150.00 |
| 01 | N | KEM600I | MC TITANIUM DIOXIDE (50#BAG) | .00 |
| 01 | N | KEM600I/SS | MC TITANIUM DIOXIDE (2M#/SS) | .00 |
| 01 | Y | KEM630 | MC TITANIUM DIOXIDE (50#BAG) | .00 |
| 01 | Y | KEM630/M | MC TITANIUM DIOXIDE (1M#/BAG) | .00 |
| | | | ** PRINCIPAL TOTAL | .00 |
| 01 | Y | KPPRDIS | MC TITANIUM DIOXIDE (50#BAG) | 62000.00 |
| 01 | Y | KPPRD3 | MC TITANIUM DIOXIDE (50#BAG) | 25700.00 |
| | | | ** PRINCIPAL TOTAL | 87700.00 |

** PRINCIPAL TOTAL

| | | | | |
|--------------------|---|---------------|---------------------------|----------|
| 01 | N | BUCFBLOC428MC | FLAMEBLOC 428 (50#) | 3750.00 |
| 01 | N | BUC023 MC | BUTROL 023 (50#) | 1950.00 |
| 01 | N | BUC047 MC | BUSPERSE 047 (400#) | 3200.00 |
| 01 | N | BUC1024 MC | BUSAN 1024(465#PLASTIC DR | 1395.00 |
| 01 | N | BUC1024TT MC | BUSAN 1024 (2325#TOTE) | 2325.00 |
| 01 | N | BUC1025/5 MC | BUSAN 1025 (5 GAL. 35#) | 35.00 |
| 01 | N | BUC1025TT MC | BUSAN 1025 (2200#TOTE) | 2200.00 |
| 01 | Y | BUC1078 MC | BUSAN 1078 (440#DR) | 440.00 |
| 01 | N | BUC11M1 MC | BUSAN 11M1 (50#) | 7500.00 |
| 01 | N | BUC11M2 MC | BUSAN 11M2 (50#) | 12000.00 |
| ** PRINCIPAL TOTAL | | | | 34795.00 |

| | | | | |
|----|---|--------------|----------------------------|---------|
| 01 | Y | DCC1003 MC | MEDIUM CHROME YELLOW 50# | .00 |
| 01 | Y | DCC1004 MC | MED CHR YELLOW (50#/BAG) | 8250.00 |
| 01 | Y | DCC1004EV MC | MED CHR YELLOW (25#EVA) | .00 |
| 01 | Y | DCC1012 MC | MED. CHR. YELLOW E. D. 50# | .00 |
| 01 | Y | DCC1032 MC | LEMON CHROME YELLOW 50# | .00 |
| 01 | Y | DCC1034 MC | PRE-DKND LEM CHR YEL #50 | .00 |
| 01 | Y | DCC1077 MC | PRIMROSE CHROME YELLOW50# | .00 |
| 01 | Y | DCC1080 MC | PRIMROSE YELLOW (50#) | .00 |
| 01 | Y | DCC1091 MC | PRIMROSE SHAD YELLOW 50# | .00 |
| 01 | Y | DCC1104 MC | HANSA YELLOW G (25#/BAG) | .00 |
| 01 | Y | DCC1112 MC | 1112 ORGANIC TRAFFIC (25# | 200.00 |
| 01 | Y | DCC1117 MC | MOD. HANSA YELLOW(25#) | .00 |
| 01 | Y | DCC1242 MC | DIARYLIDE YELLOW (25#) | .00 |

DURR MARKETING

STOCK E

| CO# | N/STK | ITEM# | DESCRIPTION | HAND |
|--------------------|-------|---------------|------------------------|------|
| 01 | N | PPG3540-1/BMC | CHOPPED STRAND (1000#) | .00 |
| ** PRINCIPAL TOTAL | | | | .00 |

| | | | | |
|--------------------|---|---------------|---------------------------|-----------|
| 01 | N | SACBLANCF/FMC | BLANC FIXE F (55.115#/BAG | 8818.40 |
| 01 | N | SACBLANCF/NMC | BLANC FIXE "N"(2204.6#PLT | 2204.60 |
| 01 | Y | SACBLANCFIXMC | BLANC FIXE MICRO (25K/BAG | 1653.45 |
| 01 | N | SACLITH3OE MC | LITHOPONE 30% E (25K/BAG) | .00 |
| 01 | N | SACSACH/L MC | SACHTOLITH L (25K/BAG) | 66744.24 |
| 01 | N | SACSACHHDSPMC | SACHTOLITH HDS (25K/BAG) | 25188.09 |
| ** PRINCIPAL TOTAL | | | | 104608.78 |

*** COMPANY TOTAL 313785.11

PENTACHEM, INC.

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EPA -

BOB BAUER / Mike Towle

610-832-6133

"ACTUAL INVENTORY"
MCC WAREHOUSE

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INVENTORY OFFERINGS

January/February/March 2001

| PRODUCT | QUANTITY (LBS.) | PALLET # | C.I. # | TYPE | MFG. |
|--------------------------------------|-----------------|--|--------|-----------------|----------|
| 1/2 SEC. N/C SOLN. 190CD162 | 2,409 | pallet # 543 | | | |
| 15 SEC. NITRO 190CT031 RC0119 | 1,087 | pallet # 124, 125 | | nitro cellulose | Hercules |
| 2-5 DI CHLORO ANILLNE BSC 1285 41131 | 151 | pallet # 220 | | intermediate | |
| 2-NAPHTHYL AMINE DISULFONIC ACID | 935 | pallet # 226 | | | |
| 3-AMINOMETHOXY-BENZ AMBER BASE | 457 | pallet # 218 | | | |
| ACRYLOID AT 400 RV5537 | 652 | pallet # 138 | | resin | |
| AEROSIL C61 SURFACTANT | 1,003 | pallet # 223 | | resin | |
| AFFLAIR 9103 | 25 | pallet # 149 | | pigment | |
| AFFLAIR 9205 PLAT. GOLD WR | 20 | pallet # 154 | | pigment | |
| AFFLAIR 9225-NDS-150 RUTILE BL | 38 | pallet # 145 | | pigment | |
| AFFLAIR 9303 NDS-150 | 183 | pallet # 154 | | pigment | |
| AFFLAIR 9505 | 49 | pallet # 145, 150 | | pigment | |
| AFFLAIR 9505 NDS-71 VIOLET PZ0890 | 48 | pallet # 134 | | pigment | |
| AFFLAIR FOPK402 ND150 RED SL. | 15 | pallet # 145 | | pigment | |
| AFFLAIR RED PEARL 9215 W.R. | 76 | pallet # 149 | | pigment | |
| AL. PASTE TUFFLAKE 5343-A | 51 | pallet # 142 | | pigment | |
| ALKAMULS EL-620 | 354 | pallet # 223 | | | |
| ALKYD RESIN 52-5284 RA1829 | 594 | pallet # 136 | | resin | |
| ALPHA NAPHTOL GROUND | 486 | pallet # 219, 220 | | resin | |
| ALPHATEX CLAY C7708A1511 | 3,000 | pallet # 386, 387 | | | |
| ALUMINUM PASTE PZ2269 | 55 | pallet # 142 | | pigment | |
| ALUMINUM PASTE 8271 PZ2035 | 315 | pallet # 130, 132 | | pigment | |
| ALUMINUM PASTE OBP-8167 PZ2184 | 300 | pallet # 131 | | pigment | |
| ALUMINUM PASTE OBP-8428 PZ2252 | 300 | pallet # 131 | | pigment | |
| ALUMINUM PASTE STAPA VP46432 G | 227 | pallet # 137 | | pigment | |
| ALUMINUM SSP-516 AR | 159 | pallet # 142 | | pigment | |
| B.O.N. RUBINE, RES. RN-0420-DC | 8,300 | pallet # 390-394, 399, 400, 402, 404-406, 408, | | oil inks | Magruder |
| B.S. 2B RED 48-1304 | 400 | pallet # 34 | | pigment | Clariant |

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| | | | | | |
|-------------------------------|-------|-----------------------------|------------|---------------|----------|
| BARIUM LITHOL 39MO2365 | 130 | pallet # 377 | P.R. 49:1 | azo red flush | Magruder |
| BARIUM LITHOL | 4,200 | | P.R. 49:1 | azo red flush | |
| BASACID BLUE 750 | 55 | pallet # 249 | D.B. 86 | acid dye | BASF |
| BASACRYL BLUE X | 91 | pallet # 157 | | | BASF |
| BASANTOL BROWN 268 | 20 | pallet # 78 | A.B.R. 355 | acid dye | BASF |
| BASF SAMPLES 383 5519 | 86 | pallet # 249 | | | BASF |
| BASIC ZINC CHROMATE | 698 | pallet # 147 | | pigment | BASF |
| BASO BLUE 645 | 110 | pallet # 78 | S.B. 4 | ink dye | BASF |
| BASONYL RED 485 | 55 | pallet # 580 | | ink dye | BASF |
| BASO RED 481 | 73 | | | ink dye | BASF |
| BASO YELLOW 124 | 110 | pallet # 78 | | ink dye | BASF |
| BAY FERROX 180M PIGMENT | 44 | pallet # 523, 524 | | ink dye | Bayer |
| BECKOSOL AA141 RA-0452 | 5,564 | pallet # 120, 121 | | resin | RCI |
| BF GOODRICH GEON VINYL R18040 | 6,150 | pallet # 562, 563, 566 | | | |
| BLANC FIXE POWDER-F | 3,452 | pallet # 150, 151 | | filler | |
| BLUE | 110 | pallet # 41 | | | |
| BLUE DYE PCOI 705655355 | 20 | pallet # 41, 84 | | | |
| BLUE PHTHALOCYANINE B4773 | 15 | pallet # 144 | | | Bayer |
| BON RED LIGHT RT585D | 125 | pallet # 569 | | | |
| BURNT UMBER L1232 BATCH 86859 | 2,000 | pallet # 384 | | pigment | |
| C13B R-4504 | 20 | pallet # 568 | | | |
| CAB 551-0.01 RC0364 | 14 | pallet # 129, 136 | | resin | Eastman |
| CAB-381-2 BP RC0388 | 50 | pallet # 123, 136 | | resin | Eastman |
| CADMIUM PURE RED 205 | 70 | pallet # 382 | | pigment | |
| CADMIUM PURE RED 207 | 295 | pallet # 383 | | pigment | |
| CADMIUM PURE RED 208 | 87 | pallet # 383 | | pigment | |
| CADMIUM PURE YELLOW 198 | 161 | pallet # 382 | | pigment | |
| CADMIUM YELLOW MC-0107 | 100 | pallet # 239 | | pigment | |
| CALCIUM 5% TEN CEM | 258 | pallet # 143 | | drier | |
| CALCIUM LITHOL | 6,900 | | | water inks | Magruder |
| CALCIUM NEODECANOIC DRIER 5% | 292 | pallet # 143, 144 | | drier | |
| CALCO CHINOLINE YELLOW SS NEW | 20 | pallet # 78, 79 | | solvent dye | |
| CAPPOXY T IRON OXIDE | 50 | pallet # 525 | | pigment | |
| CERAMIC BLACK NO. 1 | 168 | pallet # 53, 249 (row # 13) | | pigment | |
| CINQUASIA MAGENTA RT243D | 10 | pallet # 154 | | pigment | |

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|----------------------------------|-------|--|-----------|----------------|-------------------|
| CLARION RED RC3151-DC | 9,594 | pallet #414, 415-418, 461, 467, 469, 569 | | | |
| COLORRICH BLUE | 13 | pallet # 525 | | | |
| CYANAMID L480 | 440 | pallet # 62 | | | |
| CYANOX 2777 035-777 | 120 | pallet # 533 | | | |
| CYANOX LTDP ANTIOX 035-700 | 55 | pallet # 533 | | anti oxidant | American Cyanamid |
| CYASORB UV 38538 034-032 | 33 | pallet # 531 | | anti oxidant | Cytec |
| CYASORB UV3604 LIGHT STAB DS1145 | 462 | pallet # 122, 127 | | light absorber | Cytec |
| CYMEL 327 RV0741 | 17 | pallet # 138 | | light absorber | Cytec |
| DELAPHOS ZINC PHOSPHATE | 2,276 | pallet # 148, 155 | | resin | |
| DIARY YELLOW AAOT GYT11 | 498 | pallet # 565 | | zinc phosphate | |
| DISPERS WHITE O-2207 | 75 | pallet # 53 | P.W. 8 | | |
| DISPERS YELLOW W54 DGC | 95 | pallet # 157 | | | |
| DOW CORNING 200 FLUID RW0344 | 37.5 | pallet # 122 | | H2O disp pig. | |
| EM 9231 ND NNP RUT FN GRN WR11 | 100 | pallet # 130 | | silicone | Dow Corning |
| ENDUROPHAL BLUE BT 583-D | 25 | pallet # 524 | | | EM |
| ENDUROQUIN MAGENTA | 6 | pallet # 525 | | pigment | BASF |
| ETHYL ETHANOLAMIN-MIXED DSO654 | 315 | pallet # 123 | | pigment | BASF |
| EUPOLEN BLUE 60-2041 | 35 | | | solvent | Dow |
| EUPOLEN BLUE 62-2001 | 20 | pallet # 527 | P.B. 15:1 | pig. prep. | BASF |
| EUPOLEN BLUE 69-2041 | 145 | pallet # 360, 527 | P.B. 15:1 | pig. prep. | BASF |
| EUPOLEN BLUE 69-3001 | 10 | pallet # 79 | P.B. 15:1 | pig. prep. | BASF |
| EUPOLEN RED 36-9001 | 20 | pallet # 79 | P.B. 15:1 | pig. prep. | BASF |
| EUPOLEN SCARLET 44-6101 | 28 | pallet # 13 | | pig. prep. | BASF |
| EUPOLEN SCARLET FK3209 | 110 | pallet # 66 | | pig. prep. | BASF |
| EUTHYLEN BLACK 00-8005-C4 | 296 | pallet # 181 | | pig. prep. | BASF |
| F2B R-14322 | 21 | pallet # 567 | | pigment | BASF |
| FANCHON YELLOW | 10 | pallet # 523 | | | |
| FANCHON YELLOW YH-5770 | 110 | pallet # 11 | | pigment | Clariant |
| FAST SCARLET G BASE 0510279 | 117 | pallet # 220 | | pigment | Clariant |
| FERROSIL 14 | 673 | pallet # 141, 156 | | iron oxide | |
| FINESSE RED R-14322 | 75 | pallet # 567 | | | |
| FL PINK 125-445 (010-052) | 153 | pallet # 537 | | | |
| FLEXO BLUE 810 | 64 | pallet # 526, 527 | | pigment/dye | Radiant |
| FLEXO YELLOW 105 LOW DUST | 45 | pallet # 502 | | dye | BASF |
| FLEXO YELLOW 110 LOW DUST | 55 | pallet # 181 | B.Y. 2 | dye | BASF |
| | | | | ink dye | BASF |

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| | 44 | S.G. 4 | pigment | |
|-------------------------------|-------------------------------------|-----------|---------------|------------------|
| FLUORESCENT ORANGE 257-TS16 | 120 pallet # 15, 79 | | fluoresc. dye | |
| FLUOROL YELLOW 088 | 76 pallet # 531 | | | Magruder |
| GREEN GR 1028 POLYFLO 029-002 | 73 pallet # 476, 527 | | | BASF |
| HELIOGEN BLUE D7080 | 133 pallet # 38, 516 | P.B. 15:3 | pigment | BASF |
| HELIOGEN BLUE D7084 | 12 pallet # 475, 477 | | pigment | BASF |
| HELIOGEN BLUE K6811 D | 455 pallet # 79, 80, 108, 111, 112, | P.B. 15:1 | phthalo. pig. | BASF |
| HELIOGEN BLUE K6912D | 1 pallet # 526 | | pigment | BASF |
| HELIOGEN BLUE L2101F | 10 pallet # 528 | | pigment | BASF |
| HELIOGEN BLUE L6901 | 10 pallet # 79 | P.B. 15:2 | phthalo. pig. | BASF |
| HELIOGEN BLUE L6905F | 10 pallet # 476 | | pigment | BASF |
| HELIOGEN BLUE L6930 | 80.5 pallet # 79, 80, 114 | P.B. 15:2 | phthalo. pig. | BASF |
| HELIOGEN BLUE L6989F | 68 pallet # 476 | | pigment | BASF |
| HELIOGEN BLUE L7080 | 28 pallet # 53, 527 | P.B. 15:4 | phthalo. pig. | BASF |
| HELIOGEN BLUE L7101F | 101 pallet # 79, 82, 528 | P.B. 16 | phthalo. pig. | BASF |
| HELIOGEN BLUE L7560 | 99 pallet # 582 | | pigment | BASF |
| HELIOGEN GREEN K8605 | 51 pallet # 475, 477, 527 | P.G. 7 | pigment | BASF |
| HELIOGEN GREEN K8730 | 181 pallet # 235 | | plastic pig. | BASF |
| HELIOGEN GREEN K8730Z | 10 pallet # 478 | | pigment | BASF |
| HELIOGEN GREEN L8690 | 33 pallet # 581 | | pigment | BASF |
| HELIOGEN GREEN L8735 | 66 pallet # 473, 516, 527, 550, 585 | | pigment | BASF |
| HELIOGEN GREEN L9361 | 59 pallet # 535 | | pigment | BASF |
| HEUCO YELLOW 106100 (002-161) | 50 pallet # 144 | | pigment | Heuco Tech |
| HEUCOPHTHAL BLUE RF BT-627-D | 361 pallet # 539 | | pigment | Cookson |
| HVA-2 (037-078) | 2,300 pallet # 159 | | vinyl acetate | Dupont |
| HYDRATED ALUMINA | 50 pallet # 545 | | aluminum pig. | |
| IRGACOLOR YELLOW | 248 pallet # 567 | | | |
| IRGALITE YELLOW BAWP R-5147 | 12.5 pallet # 231 | | | |
| IRGAZIN BLUE (F2) | 90 | | pigment | Ciba |
| IRON BLUE A326 154 | 110 pallet # 12 | | pigment | |
| IRON OXGED FA7460 | 110 pallet # 109 | | pigment | |
| IRON OXIDE RED FA7460 | 324 pallet # 63 | | pigment | |
| IRON STERATE AM400 | 291 pallet # 220 | | pigment | |
| JONCRYL-61 JONCRYL 138 | 224 pallet # 531 | | surfactant | S.C. Johnson Wax |
| KROLOR RED KR-980D 006-980 | 100 pallet # 569 | | pigment | Dominion Color |
| KROLOR RED KR-981D | | | pigment | Dominion Color |

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| KROLOR YELLOW | 34 | pallet # 521 | | pigment | Dominion Color |
|-------------------------------|-------|---------------------------------|---------------|--------------|----------------|
| KROLOR YELLOW Ky-795-D | 34 | | | pigment | Dominion Color |
| KROMA RED PRO178 | 107 | pallet # 155 | | pigment | |
| KRONOS 2180 (000-160) | 240 | pallet # 537 | | tiO2 | Kronos |
| LIONOL BLUE | 28 | pallet # 523 | | pigment | |
| LITHOL FAST MAROON L4763 | 48 | | P.R. 52:2 | azo lake | BASF |
| LITHOL FAST SCARLET L4300 | 86 | pallet # 377, 550 | P.R. 48:4 | azo lake | BASF |
| LITHOL RED K3680 | 13 | pallet # 474 | | pigment | BASF |
| LITHOL RED NBK 3460 | 10 | pallet # 477 | | pigment | BASF |
| LITHOL RUBINE D4566DD | 33 | | P.R. 57:1 | azo lake | BASF |
| LITHOL RUBINE NBD 4580 | 6,320 | pallet # 517 | | azo lake | BASF |
| LITHOL RUBINE RES. LR-5156-DC | 120 | | | oil inks | BASF |
| LITHOL SCARLET NBD4455 | 100 | pallet # 245, 504 | P.R. 48:2 | azo lake | BASF |
| LITHOL SCARLET NBK4453 | 1,375 | pallet # 53, 71, 73, 74, 75, 76 | P.R. 48:2 | azo lake | BASF |
| LITHOL SCARLET NBS 3755 | 10 | pallet # 474 | | pigment | BASF |
| LITHOL SCARLET S3702 | 10 | pallet # 79 | P.R. 48:1 | azo lake | BASF |
| LUCONYL BLACK 0066 | 10 | pallet # 248 | P.B.L. 7 | pig. prep. | BASF |
| LUCONYL RED 3870 | 60 | pallet # 90 | P.R. 123 | pig. prep. | BASF |
| LUCONYL YELLOW 1560 | 110 | pallet # 80 | | pig. prep. | BASF |
| LUCONYL YELLOW 1916 | 110 | pallet # 111, 249 | | pig. prep. | BASF |
| LUNA YELLOW NBL1277 | 511 | pallet # 503 | P.Y. 42 | pig. prep. | BASF |
| LUWAX 9675 POWDER | 1,320 | pallet # 102, 103 | P.Y. 74 | azo coating | BASF |
| LUWAX AF31 | 132 | pallet # 378 | PP | polyeth. wax | BASF |
| LUWAX AL 3 POWDER | 325 | pallet # 361, 362 | micronized PE | polyeth. wax | BASF |
| LUWAX AM 3 | 187 | pallet # 101, 115, 363 | LDPE | polyeth. wax | BASF |
| LUWAX AM POWDER | 66 | pallet # 87 | | polyeth. wax | BASF |
| M-60 MS | 188 | | | polyeth. wax | BASF |
| MACROLEX VIOLET B (026-786) | 25 | pallet # 536 | | pigment | Bayer |
| MAGENTA BRT 343D | 41 | pallet # 523 | | pigment | Ciba |
| MAGENTA K6-MG8038 (010-302) | 57 | pallet # 536 | | pigment | Radiant |
| MAGENTA RV-6843 (006-684) | 28 | pallet # 541 | | pigment | Bayer |
| MANOX IRON BLUE 96292 A192 | 274 | pallet # 545 | | | |
| MAROON | 33 | pallet # 155 | | pigment | |
| MEARLIN BRIGHT WHITE 138X/MND | 565 | pallet # 152 | | pigment | Mearle |
| MEARLIN EXT SUPER COPPER 259Z | 55 | pallet # 134 | | pigment | Mearle |

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| Material | Quantity | Unit | Material | Quantity | Unit |
|----------------------------------|----------|-----------------------|----------|----------|------|
| MEARLIN EXT. 249X BRIGHT BRONZE | 25 | pallet # 152 | | | |
| MEARLIN EXT. 339X HI LITE ORANGE | 31 | pallet # 152 | | | |
| MEARLIN EXT. BLUE-GR 7289Z/MND | 55 | pallet # 145 | | | |
| MEARLIN EXT. RUSSET 448X/MND | 211 | pallet # 152 | | | |
| MEARLIN SUPER BLUE 639Z PZ0796 | 52 | pallet # 134 | | | |
| MEARLIN SUPER COPPER 359Z | 49 | pallet # 145 | | | |
| MEARLIN SUPER GREEN 839Z PZ0797 | 70 | pallet # 134 | | | |
| MEARLIN SUPER RUSSET 459Z/GND | 55 | pallet # 134 | | | |
| MEARLIN SUPER RUSSET 459Z/MND | 79 | pallet # 145 | | | |
| MHHPA 400-209 | 180 | pallet # 35 | | | |
| MICA 259Z | 153 | pallet # 134 | | | |
| MICRO TITANIUM MT500 SA | 41 | pallet # 151 | | | |
| MICRONAL B50 795151 | 902 | pallet # 204, 230 | | | |
| MICRONAL B60 NPC785161 | 242 | pallet # 81 | | | |
| MICRONAL POWDER FF4101 | 242 | pallet # 41 | | | |
| MICRONAL S100 | 1,210 | pallet # 81 | | | |
| MICRONAL S40 36-1240 | 242 | pallet # 66 | | | |
| MIDAS GOLD 51-738408 GL0048 | 109 | pallet # 128 | | | |
| MONARCH 1300 POWDER PK1015 | 48 | pallet # 150, 155 | | | |
| MONARCH BLUE X3485 | 100 | pallet # 522 | | | |
| MONASTRAL RED B XRT-333-D | 12 | pallet # 149 | | | |
| N-4 MAINE CODE: 957721 HOGA H07 | 55 | pallet # 83 | | | |
| NACURE 5543 DS2650 | 302 | pallet # 125, 126 | | | |
| NAPTHOL ASOL | 457 | pallet # 224 | | | |
| NEOZAPON ORANGE NB271 | 900 | pallet # 588, 589 | | | |
| NEPTUN BLACK X18 POWDER | 55 | pallet # 204 | | | |
| NEPTUN BLACK X60 (001-007) | 40 | pallet # 536 | | | |
| NEPTUN BLACK X70 (001-070) | 164 | pallet # 536, 541 | | | |
| NEPTUN BLUE LB722 | 450 | pallet # 236 | | | |
| NEPTUN ORANGE BASE 206LD | 62.5 | pallet # 109 | | | |
| NEPTUN VIOLET BASE NB604 | 5 | pallet # 475, 478-482 | | | |
| NUXTRA CALCIUM 4% | 261 | pallet # 230 | | | |
| NUXTRA ZINC 16% | 400 | pallet # 143 | | | |
| ORANGE DYE ABC 40-6224 | 33 | pallet # 68 | | | |
| PALAMID BLACK 006005 | 33 | pallet # 42 | | | |

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|--------------------------------|--------------------------------------|----------|--------------|------|
| PALAMID BROWN 30-9705 | 66 pallet # 66 | | dye | BASF |
| PALAMID RED 35-8005 | 66 pallet # 66 | | dye | BASF |
| PALANIL BRILLIANT PINK | 202 pallet # 157 | | dye | BASF |
| PALE GOLD PG8020 PZ102 | 120 pallet # 80 | | pigment | |
| PALIOCHROM BLUE FA4081/L6000 | 74 pallet # 150 | | ink pigment | BASF |
| PALIOGEN BLUE K6330 | 55 pallet # 40 | P.B. 60 | plastic pig. | BASF |
| PALIOGEN MAROON FA4175 | 66 pallet # 40 | | pigment | BASF |
| PALIOGEN MAROON FK4152 | 132 pallet # 248 | | pigment | BASF |
| PALIOGEN MAROON L3920 | 30 pallet # 84 | P.R. 179 | ink pigment | BASF |
| PALIOGEN MAROON L4020 | 99 pallet # 40, 52 | P.R. 179 | ink pigment | BASF |
| PALIOGEN ORANGE L3180HD | 60 pallet # 80, 82 | | ink pigment | BASF |
| PALIOGEN RED L3585 HD | 8 pallet # 526 | | ink pigment | BASF |
| PALIOGEN RED L3675 | 44,514 pallet # 104, 483-498, 587 | | ink pigment | BASF |
| PALIOGEN RED L3870HD | 27.5 pallet # 53 | P.R. 123 | ink pigment | BASF |
| PALIOGEN RED L3910HD | 14 pallet # 79, 84 | P.R. 178 | ink pigment | BASF |
| PALIOGEN RED L4120 | 76 pallet # 79, 104 | P.R. 179 | ink pigment | BASF |
| PALIOGEN RED V L5015 | 142 pallet # 79, 81, 82 | P.V. 29 | ink pigment | BASF |
| PALIOGEN YELLOW L 2145 | 54 pallet # 364 | | ink pigment | BASF |
| PALIOGEN BLACK (SCHWARZ) L0080 | 4,025 pallet # 199, 355-359 | P.B.L. 1 | ink pigment | BASF |
| PALIOGEN BLACK K0080 | 86 pallet # 82 | P.B.L. 1 | plastic pig. | BASF |
| PALIOGEN ORANGE L2952 HD | 33 pallet # 380 | P.O. 67 | ink pigment | BASF |
| PALIOGEN RED L3551HD | 176 pallet # 12, 81 | P.R. 251 | ink pigment | BASF |
| PALIOGEN YELLOW 1819 | 66 pallet # 499 | | pigment | BASF |
| PALIOGEN YELLOW FK4074 | 66 pallet # 81 | P.Y. 183 | pigment | BASF |
| PALIOGEN YELLOW K1090 | 26 pallet # 79, 526 | P.Y. 138 | plastic pig. | BASF |
| PALIOGEN YELLOW K1570 | 30 pallet # 84 | P.Y. 139 | plastic pig. | BASF |
| PALIOGEN YELLOW K1841D | 291 pallet # 14, 80, 84, 248, 362, 5 | P.Y. 139 | plastic pig. | BASF |
| PALIOGEN YELLOW K2270 | 27 pallet # 502, 528 | | pigment | BASF |
| PALIOGEN YELLOW L1155 | 11 pallet # 528 | | pigment | BASF |
| PALIOGEN YELLOW L1770 | 150 pallet # 78, 79, 80 | P.Y. 139 | ink pigment | BASF |
| PALIOGEN YELLOW L1820 | 96 pallet # 85, 528 | P.Y. 139 | ink pigment | BASF |
| PALIOGEN YELLOW L2145H | 55 pallet # 584 | | pigment | BASF |
| P-AMINO BENZAMIDE (1-5 BASE) | 106 pallet # 220 | | | |
| PARALOID K-125 6-7933 | 528 pallet # 115 | | plastic add. | |
| PARAPLAST 100% PLASTICIZER | 24 pallet # 142 | | plasticizer | |

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| PB-412 | 27.5 | pallet # 53 | | | | |
|------------------------------|--------|---|-----------|--|--|--------------|
| PERM RED 2B RB4121-DC | 1,600 | pallet # 411, 427-429 | | | | Magruder |
| PERMANENT YELLOW GR 11-300 | 46 | pallet # 522 | | | | Clariant |
| PHTHALO BLUE 5G GPD SW | 1,560 | pallet # 227 | | | | Lonza |
| PHTHALO BLUE B4714 | 86 | pallet # 144 | | | | Lonza |
| PIGMENT VIOLET RED (026-007) | 40 | pallet # 537 | | | | Coltech |
| POLYSTER RESIN LB100 | 825 | pallet # 45 | | | | BASF |
| PPR 4868 | 110 | pallet # 11 | | | | |
| PY719 | 110 | pallet # 42 | | | | |
| PZO 785 | 110 | pallet # 11 | | | | |
| QUICKSPERSE INK BLUE 7149 | 132 | pallet # 85 | P.B. 15:4 | | | |
| QUINACRIDOE RED 2283620 | 35 | pallet # 11 | | | | |
| QUINDO RED R6704 | 2,289 | pallet # 552-555, 560, 561 | | | | Bayer |
| QUINDO RED VIOLET RV-6951 | 2,800 | pallet # 551, 556-559, 561 | | | | Bayer |
| QUINDO VIOLET RV-7051 | 11,446 | pallet # 507-515, 518, 571-579 | | | | Bayer |
| R.L.C. | 9,100 | | | | | Bayer |
| R.L.C. NON RES. | 1,000 | | | | | Magruder |
| R.L.C. RES. | 1,500 | | | | | Magruder |
| REAKT VIOLET 436-2807 | 110 | pallet # 78 | | | | Magruder |
| RED 1400 02353283 | 66 | pallet # 85 | | | | |
| RED 2B | 116 | pallet # 565, 586 | | | | |
| RED 2B, B.S. | 1,200 | | | | | solvent oils |
| RED 2B, YS | 6,400 | | | | | solvent oils |
| RED MAROON BK 35012 | 87 | pallet # 92, 211 | | | | solvent oils |
| RED SUDAN 298 006-298 | 40 | pallet # 531 | | | | Magruder |
| RESIMENE 747 RU0586 | 110 | pallet # 140 | | | | Magruder |
| RHODAMINE B PMA MM-5056-DC | 5,720 | pallet # 395, 399, 400, 402, 403, 404, 408, 410 | | | | BASF |
| RHODAMINE YS SMA RH-1131-DC | 2,000 | pallet # 396-398, 403 | | | | |
| RUBIN NBD R-14270 | 620 | pallet # 569-570 | | | | oil ink |
| SCARLET NBD 4455 | 50 | pallet # 504 | | | | solvent oils |
| SETALUX 10-7002 RV5787 | 1,661 | pallet # 126, 127 | | | | |
| SETALUX 17-7022 | 272 | pallet # 122 | | | | |
| SETALUX 17-7202 RV5789 | 353 | pallet # 126, 127 | | | | |
| SICO FAST ORANGE NBD2851 | 1,716 | pallet # 175, 176, 177, 178 | | | | azo pigment |
| SICO FAST RED D 3855 | 20 | pallet # 474 | | | | azo pigment |

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|------------------------------|-------|-----------------------------|-----------|---------------|------|
| SICO FAST RED L3652HD | 824.5 | pallet # 87, 91, 92 | P.R. 3 | azo pigment | BASF |
| SICO FAST RED L3855 | 164 | pallet # 203, 206, 550, 580 | P.R. 112 | azo pigment | BASF |
| SICO FAST YELLOW D1358 | 82 | pallet # 12 | P.Y. 83 | azo pigment | BASF |
| SICO FAST YELLOW DYE NBK1783 | 78 | pallet # 101, 474 | P.Y. 83 | azo pigment | BASF |
| SICO FAST YELLOW NBD 1760 | 46 | pallet # 502, 585 | | azo pigment | BASF |
| SICO FAST YELLOW NBK 1265 | 18 | pallet # 474 | | azo pigment | BASF |
| SICO ORANGE 30AV2368 | 10 | pallet # 13 | | azo pigment | BASF |
| SICO ORANGE L3052 HD | 71 | pallet # 36, 527 | P.O. 5 | azo pigment | BASF |
| SICO ORANGE NBD2855 | 66 | | P.O. 46 | azo pigment | BASF |
| SICO ORANGE NBL2840 | 275 | pallet # 35, 47, 85 | P.O. 46 | azo pigment | BASF |
| SICO RED 35AV0990 | 30 | pallet # 13 | | azo pigment | BASF |
| SICO RED 37AV1087 | 30 | pallet # 13 | | azo pigment | BASF |
| SICO RED 37AV2331 | 10 | pallet # 13 | | azo pigment | BASF |
| SICO RED 3940 | 623 | pallet # 372, 373, 503, 504 | P.R. 3 | azo pigment | BASF |
| SICO RED 38AV1088 | 20 | pallet # 13 | | azo pigment | BASF |
| SICO RED 38AV1775 | 20 | pallet # 13 | | azo pigment | BASF |
| SICO RED 5-03D4859 | 440 | pallet # 520 | | azo pigment | BASF |
| SICO RED L3850 | 110 | pallet # 86 | P.R. 3 | azo pigment | BASF |
| SICO RED L3855 | 5 | pallet # 527 | | azo pigment | BASF |
| SICO RED NBL3751 | 116 | pallet # 101, 474 | P.R. 3 | azo pigment | BASF |
| SICO RED NBL3841 | 12 | pallet # 474 | | azo pigment | BASF |
| SICO YELLOW L0951 NLD203192 | 66 | pallet # 82 | P.Y. 3 | azo pigment | BASF |
| SICO YELLOW NBD1358 | 110 | | P.Y. 74 | azo pigment | BASF |
| SICO YELLOW NBD1360 | 1,333 | | P.Y. 74 | azo pigment | BASF |
| SICO YELLOW FR1252 | 264 | pallet # 580, 582 | | azo pigment | BASF |
| SICO YELLOW NBL 1252 HD | 254 | pallet # 474, 528 | | azo pigment | BASF |
| SICONYL BLACK FK P3269 | 550 | pallet # 72, 88 | | azo pigment | BASF |
| SICOPAL BLUE K8310 | 330 | Pallet # 216 | | pigment | BASF |
| SICOPAL BLUE L7210 | 192 | pallet # 9, 80, 81 | P.B. 28 | inorganic pig | BASF |
| SICOPAL BROWN | 66 | pallet # 87 | P.B. 28 | inorganic pig | BASF |
| SICOPAL BROWN K2595 | 165 | pallet # 42, 584 | P.B.R. 31 | inorganic pig | BASF |
| SICOPAL BROWN K2795 | 100 | pallet # 55, 104, 584 | P.B.R. 29 | inorganic pig | BASF |
| SICOPAL GREEN K9610 | 55 | pallet # 381, 504 | | inorganic pig | BASF |
| SICOPAL GREEN K9710 | 60 | pallet # 80 | | inorganic pig | BASF |
| SICOPAL GREEN L9610 | 150 | pallet # 41 | | inorganic pig | BASF |

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|-----------------------------|--------------------------------------|----------|----------------|------|
| SICOPAL YELLOW | 345 pallet # 52, 211 | P.Y. 184 | inorganic pig | BASF |
| SICOPAL YELLOW FK4165 | 340 pallet # 12, 40, 41 | | inorganic pig | BASF |
| SICOPAL YELLOW FK4206 | 176 pallet # 12, 41 | | inorganic pig | BASF |
| SICOPAL YELLOW L1100 | 51 pallet # 586 | | inorganic pig | BASF |
| SICOPAL YELLOW L1112 | 1,562 pallet # 55, 249, 530, 550 | P.Y. 184 | inorganic pig | BASF |
| SICOPAL YELLOW L1115 | 55 pallet # 211 | P.Y. 184 | inorganic pig | BASF |
| SICOPLAST BLUE 88-0850 | 292 pallet # 60, 65, 83, 526, 527 | | pigment mix | BASF |
| SICOPLAST BROWN 39-0420 | 370 pallet # 52, 55, 207 | | pigment mix | BASF |
| SICOPLAST BROWN FK27-0110 | 5,541 pallet # 81, 84, 243, 244 | | pigment mix | BASF |
| SICOPLAST ORANGE NB 28-0880 | 842 pallet # 506, 528 | | pigment mix | BASF |
| SICOPLAST RED 32-1720 | 333 pallet # 60, 65, 235 | | pigment mix | BASF |
| SICOPLAST RED 36-0330 | 2,296 pallet # 88, 99, 100, 109, 541 | | pigment mix | BASF |
| SICOPLAST RED 37-0270 | 880 pallet # 590, 591 | | pigment mix | BASF |
| SICOPLAST RED 37-0280 | 129 pallet # 98 | | pigment mix | BASF |
| SICOPLAST RED NB | 98 | | pigment mix | BASF |
| SICOPLAST V BROWN 39-0R0 | 220 pallet # 235 | | pigment mix | BASF |
| SICOPLAST YELLOW 08-0390 | 880 pallet # 34, 56, 83 | | pigment mix | BASF |
| SICOPLAST YELLOW 20-1050 | 110 pallet # 41 | | pigment mix | BASF |
| SICOPLAST YELLOW NB10-0290 | 47 pallet # 381 | | pigment mix | BASF |
| SICOPLAST YELLOW NBFK3286 | 110 pallet # 41 | | pigment mix | BASF |
| SICOPUR RED S2832 | 60 pallet # 60 | | pigment | BASF |
| SICOR ZNP/S | 528 pallet # 9, 68, 85, 516 | | anticorrosion | BASF |
| SICORIN RZ | 220 pallet # 66, 108, 253 | | anticorrosion | BASF |
| SICOSTAB R6001 | 55 pallet # 110 | | heat stabilize | BASF |
| SICOTAN YELLOW 515951 | 52 pallet # 208 | P.BR. 24 | inorganic pig | BASF |
| SICOTAN YELLOW K0911 | 935 pallet # 43 | P.Y. 53 | inorganic pig | BASF |
| SICOTAN YELLOW K1010 | 393 pallet # 14, 207, 252, 374 | P.Y. 53 | inorganic pig | BASF |
| SICOTAN YELLOW K1011FG | 330 pallet # 52, 66, 104, 106 | P.Y. 53 | inorganic pig | BASF |
| SICOTAN YELLOW K2080FG | 540 pallet # 168, 252, 362, 370, 51 | P.BR. 24 | inorganic pig | BASF |
| SICOTAN YELLOW K2107FG | 97 pallet # 12, 527 | P.BR. 24 | inorganic pig | BASF |
| SICOTAN YELLOW K2109 | 110 pallet # 66 | P.BR. 24 | inorganic pig | BASF |
| SICOTAN YELLOW L1012 | 456 pallet # 216, 246, 584, 585 | P.Y. 53 | inorganic pig | BASF |
| SICOTAN YELLOW L1912 | 440 pallet # 549, 581 | P.BR. 24 | inorganic pig | BASF |
| SICOTAN YELLOW L2010 | 1,925 pallet # 66, 77 | P.BR. 24 | inorganic pig | BASF |
| SICOTAN YELLOW NBK2011 FG | 314 pallet # 81, 108, 516, 528 | P.BR. 24 | inorganic pig | BASF |

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|--------------------------------|-------|---------------------------------|---------|----------------|--------------|
| SICOTRANS BLUE L6315 | 220 | pallet # 12, 80 | | | |
| SICOTRANS RED FA7458 | 170 | pallet # 80 | | trans iron pig | BASF |
| SICOTRANS RED IRON OXIDE R9998 | 50 | pallet # 545 | | trans iron pig | BASF |
| SICOTRANS RED IRON OXIDE | 33 | pallet # 108 | | | |
| SICOTRANS RED K2819 | 107 | pallet # 526, 527, 581 | | trans iron pig | BASF |
| SICOTRANS RED K2915 | 6 | pallet # 527 | | pigment | BASF |
| SICOTRANS RED L2715 | 5 | pallet # 527 | | pigment | BASF |
| SICOTRANS YELLOW L1910 | 14 | pallet # 526 | | pigment | BASF |
| SICOTRANS YELLOW L1912 | 35 | pallet # 526, 527 | | pigment | BASF |
| SICOTRANS YELLOW L1915 | 21 | pallet #475, 516, 526, 585 | | pigment | BASF |
| SICOTRANS YELLOW L1916 | 5,537 | pallet # 516, 527, 546, 547, 54 | P.Y. 42 | pigment | BASF |
| SILBERLINE SS5240 AR PZ0103 | 61 | pallet # 145 | | trans iron pig | BASF |
| SILBERLINE SS5242AR | 4 | pallet # 142 | | aluminum pig. | Silberline |
| SILBERLINE SSP303AR | 34 | pallet # 145 | | aluminum pig. | Silberline |
| SILBERLINE SSP-504 AR PZ2380 | 45.5 | pallet # 126 | | aluminum pig. | Silberline |
| SPARKLE SILVER SS6246AR PZ2230 | 168 | pallet # 137 | | aluminum pig. | Silberline |
| STAPA METALLUX 212(OBP-8420) | 172 | pallet # 121, 130 | | | |
| STAPA METALLUX R277 PZ2163 | 1,020 | pallet # 130, 133 | | | |
| SUNBRITE RED 42:2 | 66 | pallet # 9 | | | |
| THERMOPLAST BLUE 684 | 67 | pallet # 217, 247 | S.V. 13 | plastic dye | |
| THERMOPLAST YELLOW 104 | 61 | pallet # 527, 585, 586 | | plastic dye | |
| TINUVIN 123 | 114 | pallet # 229 | | plastic add. | Ciba |
| TINUVIN 440 DS2593 | 8.5 | pallet # 126 | | plastic add. | Ciba |
| TINUVIN 765 034-765 | 330 | pallet # 532 | | plastic add. | Ciba |
| TITANIUM DIOXIDE RUTILE R-98 | 132 | pallet # 52 | | | |
| TRANS OXIDE RED 30-1023 | 110 | pallet # 11 | | pigment | Hilton Davis |
| TRANS RED 10-37DC 0113 006-113 | 125 | pallet # 533 | | pigment | Hilton Davis |
| TRIGONOX 101-75 PP | 100 | pallet # 50 | | plastic add. | Ciba |
| ULTRA MARINE BLUE | 147 | pallet # 521 | | pigment | |
| ULTRAMARINE BLUE 6177 | 144 | | | pigment | |
| VANOX 898 AO146 | 110 | pallet # 42 | | | |
| VERMELNO THERMOPLAST LB454 | 44 | pallet # 476 | | | |
| VIOLET NRT 201D | 40 | pallet # 524 | | | |
| YELLOW | 132 | pallet # 88 | | pigment | Cookson |
| YELLOW 157 | 22 | pallet # 526 | | pigment | |

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|-----------------------------|--|-------|--------------|--|-----------|-----------|--------------|
| YELLOW 940 R-14959 | | 300 | pallet # 564 | | | pigment | |
| YELLOW 275-0049 (002-026) | | 44 | pallet # 535 | | | pigment | Sun Chemical |
| YELLOW 3412-2 | | 66 | pallet # 85 | | | pigment | |
| YELLOW 1534 R-5104 | | 141 | pallet # 568 | | | pigment | |
| YELLOW OXIDE 3910 .PYO351 | | 150 | pallet # 156 | | | pigment | |
| ZAPON BLACK X50 | | 22 | | | S.B.L. 27 | metal dye | BASF |
| ZAPON BROWN 286 | | 110 | | | | metal dye | BASF |
| ZAPON BROWN 287 | | 25 | | | | metal dye | BASF |
| ZINC CHROMATE 1085 (PYO418) | | 60 | pallet # 156 | | | | |
| ZINC DUST PRODUCT # 461454 | | 1,100 | pallet # 89 | | | | |
| ZINC OCTOATE 8% DSO254 | | 375 | pallet # 125 | | | drier | |

APPENDIX 4

WATER CONTAINMENT STRATEGIES

Bridgeport Fire ER Suggestions for Containment of Surface Water Runoff

The following list provides potential methods to deal with surface water runoff and contamination resulting from both storm events and fire fighting measures during the response at the Bridgeport Fire ER. These measures may be implemented in the event that analytical data indicates significant concentrations of contaminants.

- Cover areas of concern (*i.e.* pile of titanium dioxide) with poly until more permanent measures of containment can be installed.
- Construction/excavation of sedimentation pond along canal path to provide storage and settling of water during heavy flow events.
- Sampling and monitoring of effluent from discharge points including but not limited to the canal discharge to Schuylkill River as well as the discharge pipes located along the bank of the Schuylkill River providing drainage from the site; a total of 7 possible discharge pipes have been identified along the river-only 4 have been identified as flowing since the response was initiated.
- Install containment berms around various drains located on the site property to minimize contaminants entering canal and basement areas.
- Divert flow from canal upgradient of site property using pumps and hoses to direct flow into Schuylkill prior to entering site areas of concern; however, this would do nothing to address the stormwater which reportedly is channeled into the canal from sources outside the site property (*i.e.* Borough of Bridgeport).
- Contractors should maintain emergency pump equipment to the extent practicable to address significant releases of contaminants during demolition and cleanup operations.
- To the extent practicable, ensure that hazardous materials are removed from areas where they may potentially enter the canal; in addition, hazardous materials staging areas with containment (*i.e.* berms and liners) should be placed in areas away from drains or other pathways to the canal.

APPENDIX 5

EPA ANALYTICAL DATA May 18, 2001 Canal Sample

QC Laboratories, 1205 Industrial Blvd., Southampton, PA 18966
Phone: 215-355-3900 FAX: 215-355-7231

FAST FAX ADVANCE ANALYTICAL RESULTS
*Approved Analytical Report will follow
by U. S. Mail or express carrier.*

TO: (b) (4)
COMPANY: TETRA TECH EM INC.
FAX PHONE: 1-610-485-8587

FROM: (b) (4)
SENT ON: Mon May 21 12:03:04 2001

NUMBER OF PAGES (Including Cover): 6

COMMENTS:

PLEASE CALL NUMBER ABOVE IF FAX TRANSMISSION IS INCOMPLETE.

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Analytical Results

05/21/01 12:03pm

(b) (4)

TETRA TECH EM INC.
107 CHELSEA PARKWAY
BOOTHWYN, PA 190061

Regarding:

(b) (4)

TETRA TECH EM INC.
107 CHELSEA PARKWAY
BOOTHWYN, PA 190061

Account No: C00633. TETRA TECH EM INC.
Project No: C00633. TETRA TECH EM INC.

P.O. No:
PWSID No:

Inv. No:

Sample Number L761423-1
Sample Description 03-0105-L03 BF-SW-01 END OF CANAL
Received Temp: 55°F Iced (Y/N): Y

Sample Date/Time/Temp 05/18/01 08:55am NA°F
Sampled by Customer Sampled

| Parameter | Method | Result | RLs | Test Date |
|------------------|-------------------|---------------|---------------|-----------|
| * CALCIUM | SW846 Method 6010 | 66.7 mg/l | 0.100 mg/l | 05/20/01 |
| * POTASSIUM | SW846 Method 6010 | 11.6 mg/l | 0.100 mg/l | 05/20/01 |
| * SODIUM | SW846 Method 6010 | 99.3 mg/l | 1.00 mg/l | 05/20/01 |
| * SILVER | SW846 Method 6010 | ND mg/l | 0.00200 mg/l | 05/20/01 |
| * ALUMINUM | SW846 Method 6010 | 1.17 mg/l | 0.100 mg/l | 05/20/01 |
| * ARSENIC | SW846 Method 6010 | ND mg/l | 0.0100 mg/l | 05/20/01 |
| * BARIUM | SW846 Method 6010 | 0.151 mg/l | 0.0100 mg/l | 05/20/01 |
| * BERYLLIUM | SW846 Method 6010 | ND mg/l | 0.00200 mg/l | 05/20/01 |
| * CADMIUM | SW846 Method 6010 | 0.0104 mg/l | 0.00400 mg/l | 05/20/01 |
| * COBALT | SW846 Method 6010 | ND mg/l | 0.0100 mg/l | 05/20/01 |
| * CHROMIUM | SW846 Method 6010 | 0.0168 mg/l | 0.0100 mg/l | 05/20/01 |
| * COPPER | SW846 Method 6010 | 0.237 mg/l | 0.0100 mg/l | 05/20/01 |
| * IRON | SW846 Method 6010 | 2.03 mg/l | 0.0250 mg/l | 05/20/01 |
| * MAGNESIUM | SW846 Method 6010 | 22.2 mg/l | 0.100 mg/l | 05/20/01 |
| * MANGANESE | SW846 Method 6010 | 0.372 mg/l | 0.0100 mg/l | 05/20/01 |
| * NICKEL | SW846 Method 6010 | 0.0164 mg/l | 0.0100 mg/l | 05/20/01 |
| * LEAD | SW846 Method 6010 | 0.0341 mg/l | 0.00500 mg/l | 05/20/01 |
| * ANTIMONY | SW846 Method 6010 | ND mg/l | 0.0200 mg/l | 05/20/01 |
| * SELENIUM | SW846 Method 6010 | 0.00525 mg/l | 0.00500 mg/l | 05/20/01 |
| * THALLIUM | SW846 Method 6010 | ND mg/l | 0.0100 mg/l | 05/20/01 |
| * VANADIUM | SW846 Method 6010 | 0.0127 mg/l | 0.0100 mg/l | 05/20/01 |
| * ZINC | SW846 Method 6010 | 2.11 mg/l | 0.00500 mg/l | 05/20/01 |
| * MERCURY | SW846 Method 7470 | 0.000200 mg/l | 0.000100 mg/l | 05/18/01 |
| * PHENOL | EPA Method 8270 | 1.65 J ug/l | 10.0 ug/l | 05/20/01 |
| * 2-CHLOROPHENOL | EPA Method 8270 | ND ug/l | 10.0 ug/l | 05/20/01 |
| * 2-METHYLPHENOL | EPA Method 8270 | ND ug/l | 10.0 ug/l | 05/20/01 |
| * 4-METHYLPHENOL | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * 2-NITROPHENOL | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the RLs.

QC INC's laboratory certification ID's are: PADER 09-131; NJDEP Southampton 77166, Wind Gap 77001, Alltest 02015 additional states upon request.

Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; RLs=laboratory reporting limits; L/A=laboratory accident; TNTC=too numerous to count

A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

All analysis, except field tests are conducted in Southampton, PA unless otherwise identified. All parameters marked with '*' have NELAP accreditation.

(b) (4)



Analytical Results

05/21/01 12:03pm

Account No: C00633, TETRA TECH EM INC.
Project No: C00633, TETRA TECH EM INC.

P.O. No:
PWSID No:

Inv. No:

Sample Number L761423-1
Sample Description 03-0105-L03 BF-SW-01 END OF CANAL

| Parameter | Method | Result | Samp. Date/Time/Temp 05/18/01 08:55am NA°F | RLs | Sampled by Customer Sampled | Test Date |
|--------------------------------|-----------------|-------------|---|-----------|--------------------------------|-----------|
| * 2,4-DIMETHYLPHENOL | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 2,4-DICHLOROPHENOL | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 4-CHLORO-3-METHYLPHENOL | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 2,4,6-TRICHLOROPHENOL | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 2,4,5-TRICHLOROPHENOL | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 2,4-DINITROPHENOL | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 4-NITROPHENOL | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 4,6-DINITRO-2-METHYLPHENOL | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * PENTACHLOROPHENOL | EPA Method 8270 | ND ug/l | | 20.0 ug/l | | 05/20/01 |
| * N-NITROSODIMETHYLAMINE | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * BIS(2-CHLOROETHYL) ETHER | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 1,3-DICHLOROBENZENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 1,4-DICHLOROBENZENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * BENZYL ALCOHOL | EPA Method 8270 | 4.07 J ug/l | | 5.00 ug/l | | 05/20/01 |
| * 1,2-DICHLOROBENZENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * BIS(2-CHLOROISOPROPYL) ETHER | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * N-NITROSO-DI-N-PROPYLAMINE | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * HEXACHLOROETHANE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * NITROBENZENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * ISOPHORONE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * BENZOIC ACID | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 1,2,4-TRICHLOROBENZENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * NAPHTHALENE | EPA Method 8270 | 7.69 ug/l | | 2.00 ug/l | | 05/20/01 |
| * 4-CHLOROANILINE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * HEXACHLOROBTADIENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 2-METHYLNAPHTHALENE | EPA Method 8270 | 2.48 J ug/l | | 5.00 ug/l | | 05/20/01 |
| * HEXACHLOROCYCLOPENTADIENE | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 2-CHLORONAPHTHALENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * 2-NITROANILINE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * DIMETHYL PHTHALATE | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * ACENAPHTHYLENE | EPA Method 8270 | 1.91 J ug/l | | 2.00 ug/l | | 05/20/01 |
| * 2,6-DINITROTOLUENE | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 3-NITROANILINE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * ACENAPHTHENE | EPA Method 8270 | ND ug/l | | 2.00 ug/l | | 05/20/01 |
| * DIBENZOFURAN | EPA Method 8270 | ND ug/l | | 2.00 ug/l | | 05/20/01 |
| * 2,4-DINITROTOLUENE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * DIETHYLPHTHALATE | EPA Method 8270 | ND ug/l | | 10.0 ug/l | | 05/20/01 |
| * 4-CHLOROPHENYL PHENYL ETHER | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |
| * FLUORENE | EPA Method 8270 | ND ug/l | | 2.00 ug/l | | 05/20/01 |
| * 4-NITROANILINE | EPA Method 8270 | ND ug/l | | 5.00 ug/l | | 05/20/01 |

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the RLs.

QC INC's laboratory certification ID's are: PADER 09-131; NJDEP Southampton 77166, Wind Gap 77001. Alltest 02015 additional states upon request.

Definitions: ND-not detected; NEG-negative; POS-positive; COL-colonies; RLs-laboratory reporting limits; L/A-laboratory accident; TNTC-too numerous to count

A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

All analysis, except field tests are conducted in Southampton, PA unless otherwise identified. All parameters marked with '*' have NELAP accreditation.

(b) (4)



Analytical Results

05/21/01 12:03pm

Account No: C00633, TETRA TECH EM INC.
Project No: C00633, TETRA TECH EM INC.

P.O. No:
PWSID No:

Inv. No:

Sample Number L761423-1
Sample Description 03-0105-L03 BF-SW-01 END OF CANAL

| Parameter | Method | Result | RLs | Test Date |
|------------------------------|-------------------------|--------------|-------------|-----------|
| 1,2-DIPHENYLHYDRAZINE | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| N-NITROSODIPHENYLAMINE | EPA Method 8270 | ND ug/l | 10.0 ug/l | 05/20/01 |
| * 4-BROMOPHENYL PHENYL ETHER | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * HEXACHLOROBENZENE | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * PHENANTHRENE | EPA Method 8270 | ND ug/l | 2.00 ug/l | 05/20/01 |
| * ANTHRACENE | EPA Method 8270 | 2.30 J ug/l | 2.00 ug/l | 05/20/01 |
| * CARBAZOLE | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * DI-N-BUTYLPHTHALATE | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * FLUORANTHENE | EPA Method 8270 | 2.10 J ug/l | 2.00 ug/l | 05/20/01 |
| BENZIDINE | EPA Method 8270 | ND ug/l | 20.0 ug/l | 05/20/01 |
| * PYRENE | EPA Method 8270 | 1.86 J ug/l | 2.00 ug/l | 05/20/01 |
| * BUTYL BENZYL PHTHALATE | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * 3,3'-DICHLOROBENZIDINE | EPA Method 8270 | ND ug/l | 5.00 ug/l | 05/20/01 |
| * BENZO(A)ANTHRACENE | EPA Method 8270 | 1.33 J ug/l | 2.00 ug/l | 05/20/01 |
| * CHRYSENE | EPA Method 8270 | 1.21 J ug/l | 2.00 ug/l | 05/20/01 |
| * BIS(2-ETHYLHEXYL)PHTHALATE | EPA Method 8270 | 2.63 JB ug/l | 5.00 ug/l | 05/20/01 |
| * DI-N-OCTYLPHTHALATE | EPA Method 8270 | ND ug/l | 10.0 ug/l | 05/20/01 |
| * BENZO(B)FLUORANTHENE | EPA Method 8270 | ND ug/l | 2.00 ug/l | 05/20/01 |
| * BENZO(K)FLUORANTHENE | EPA Method 8270 | 1.07 J ug/l | 2.00 ug/l | 05/20/01 |
| * BENZO(A)PYRENE | EPA Method 8270 | 1.03 J ug/l | 2.00 ug/l | 05/20/01 |
| * INDENO(1,2,3-CD)PYRENE | EPA Method 8270 | ND ug/l | 2.00 ug/l | 05/20/01 |
| * DIBENZ(A,H)ANTHRACENE | EPA Method 8270 | ND ug/l | 2.00 ug/l | 05/20/01 |
| * BENZO(G,H,I)PERYLENE | EPA Method 8270 | ND ug/l | 2.00 ug/l | 05/20/01 |
| * BIS(2-CHLOROETHOXY)METHANE | EPA Method 8270 | ND ug/l | 10.0 ug/l | 05/20/01 |
| UNKNOWN-1 | EPA 8270 Library Search | 138. J ug/l | | 05/20/01 |
| UNKNOWN-2 | EPA 8270 Library Search | 40.7 J ug/l | | 05/20/01 |
| UNKNOWN-3 | EPA 8270 Library Search | 12.0 J ug/l | | 05/20/01 |
| UNKNOWN-4 | EPA 8270 Library Search | 5.35 J ug/l | | 05/20/01 |
| UNKNOWN-5 | EPA 8270 Library Search | 22.9 J ug/l | | 05/20/01 |
| UNKNOWN-6 | EPA 8270 Library Search | 8.19 J ug/l | | 05/20/01 |
| UNKNOWN-7 | EPA 8270 Library Search | 17.7 J ug/l | | 05/20/01 |
| CAPROLACTAM | EPA 8270 Library Search | 75.6 NJ ug/l | | 05/20/01 |
| UNKNOWN-8 | EPA 8270 Library Search | 59.4 J ug/l | | 05/20/01 |
| * ALDRIN | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 |
| * ALPHA-BHC | EPA Method 8081 | ND ug/l | 0.0200 ug/l | 05/20/01 |
| * BETA-BHC | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 |
| * GAMMA-BHC (LINDANE) | EPA Method 8081 | ND ug/l | 0.0300 ug/l | 05/20/01 |
| * DELTA-BHC | EPA Method 8081 | ND ug/l | 0.0200 ug/l | 05/20/01 |
| * CHLORDANE | EPA Method 8081 | ND ug/l | 0.200 ug/l | 05/20/01 |
| * 4,4'-DDD | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 |

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the RLs.

QC INC's laboratory certification ID's are: PADER 09-131; NJDEP Southampton 77166, Wind Gap 77001, Alltest 02015 additional states upon request.

Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; RLs=laboratory reporting limits; L/A=laboratory accident; TNTC=too numerous to count

A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

All analysis, except field tests are conducted in Southampton, PA unless otherwise identified. All parameters marked with '*' have NELAP accreditation.

(b) (4)



Analytical Results

05/21/01 12:03pm

Account No: C00633, TETRA TECH EM INC.
Project No: C00633, TETRA TECH EM INC.

P.O. No:
PWSID No:

Inv. No:

| Sample Number | Sample Description | Method | Result | Samp. Date/Time/Temp | Sampled by |
|----------------------------|-----------------------------------|-------------|-------------|-----------------------|------------------|
| L761423-1 | 03-0105-L03 BF-SW-01 END OF CANAL | | | 05/18/01 08:55am MA°F | Customer Sampled |
| Parameter | | | | RLs | Test Date |
| * 4,4'-DDE | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 | |
| * 4,4'-DDT | EPA Method 8081 | ND ug/l | 0.0500 ug/l | 05/20/01 | |
| * DIELDRIN | EPA Method 8081 | ND ug/l | 0.0300 ug/l | 05/20/01 | |
| * ENDOSULFAN I | EPA Method 8081 | ND ug/l | 0.0200 ug/l | 05/20/01 | |
| * ENDOSULFAN II | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 | |
| * ENDOSULFAN SULFATE | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 | |
| * ENDRIN | EPA Method 8081 | ND ug/l | 0.0400 ug/l | 05/20/01 | |
| * ENDRIN ALDEHYDE | EPA Method 8081 | ND ug/l | 0.0500 ug/l | 05/20/01 | |
| * HEPTACHLOR | EPA Method 8081 | ND ug/l | 0.0200 ug/l | 05/20/01 | |
| * HEPTACHLOR EPOXIDE | EPA Method 8081 | ND ug/l | 0.0500 ug/l | 05/20/01 | |
| * METHOXYCHLOR | EPA Method 8081 | ND ug/l | 0.0100 ug/l | 05/20/01 | |
| * TOXAPHENE | EPA Method 8081 | ND ug/l | 0.500 ug/l | 05/20/01 | |
| * AROCLOR-1016 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * AROCLOR-1221 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * AROCLOR-1232 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * AROCLOR-1242 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * AROCLOR-1248 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * AROCLOR-1254 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * AROCLOR-1260 | EPA Method 8082 | ND ug/l | 5.00 ug/l | 05/20/01 | |
| * CHLOROMETHANE | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * VINYL CHLORIDE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * BROMOMETHANE | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * CHLOROETHANE | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * 1,1-DICHLOROETHENE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * ACETONE | EPA Method 8260 | 307. ug/l | 5.00 ug/l | 05/18/01 | |
| * CARBON DISULFIDE | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * METHYLENE CHLORIDE | EPA Method 8260 | 1.37 J ug/l | 2.00 ug/l | 05/18/01 | |
| * TRANS-1,2-DICHLOROETHENE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * ACROLEIN | EPA Method 8260 | ND ug/l | 50.0 ug/l | 05/18/01 | |
| * ACRYLONITRILE | EPA Method 8260 | ND ug/l | 25.0 ug/l | 05/18/01 | |
| * 1,1-DICHLOROETHANE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * VINYL ACETATE | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * CIS-1,2-DICHLOROETHENE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * 2-BUTANONE | EPA Method 8260 | 297. ug/l | 10.0 ug/l | 05/18/01 | |
| * CHLOROFORM | EPA Method 8260 | 1.60 J ug/l | 1.00 ug/l | 05/18/01 | |
| * 1,1,1-TRICHLOROETHANE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * CARBON TETRACHLORIDE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * BENZENE | EPA Method 8260 | 1.24 J ug/l | 1.00 ug/l | 05/18/01 | |
| * 1,2-DICHLOROETHANE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * TRICHLOROETHENE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the RLS.

QC INC's laboratory certification ID's are: PADER 09-131; NJDEP Southampton 77166, Wind Gap 77001. All test 02015 additional states upon request.

Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; RLS=laboratory reporting limits; L/A=laboratory accident; TNTC=too numerous to count

A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

All analysis, except field tests are conducted in Southampton, PA unless otherwise identified. All parameters marked with "*" have NELAP accreditation.

(b) (4)



Analytical Results

05/21/01 12:03pm

Account No: C00633, TETRA TECH EM INC.
Project No: C00633, TETRA TECH EM INC.

P.O. No:
PWSID No:

Inv. No:

| Sample Number | Sample Description | Method | Result | Samp. Date/Time/Temp | Sampled by |
|-----------------------------|-----------------------------------|-------------|-------------|-----------------------|------------------|
| L761423-1 | 03-0105-L03 BF-SW-01 END OF CANAL | | | 05/18/01 08:55am NA°F | Customer Sampled |
| Parameter | Method | Result | RLs | Test Date | |
| 1,2-DICHLOROPROPANE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * BROMODICHLOROMETHANE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * 2-CHLOROETHYL VINYL ETHER | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * CIS-1,3-DICHLOROPROPENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * 4-METHYL-2-PENTANONE | EPA Method 8260 | 36.5 ug/l | 10.0 ug/l | 05/18/01 | |
| * TOLUENE | EPA Method 8260 | 6.79 ug/l | 5.00 ug/l | 05/18/01 | |
| * TRANS-1,3-DICHLOROPROPENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * 1,1,2-TRICHLOROETHANE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * TETRACHLOROETHENE | EPA Method 8260 | 2.80 J ug/l | 1.00 ug/l | 05/18/01 | |
| * 2-HEXANONE | EPA Method 8260 | ND ug/l | 10.0 ug/l | 05/18/01 | |
| * DIBROMODICHLOROMETHANE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * CHLOROBENZENE | EPA Method 8260 | ND ug/l | 2.00 ug/l | 05/18/01 | |
| * ETHYL BENZENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * M&P-XYLENES | EPA Method 8260 | 1.65 J ug/l | 2.00 ug/l | 05/18/01 | |
| * O-XYLENE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * STYRENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * BROMOFORM | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * 1,1,2,2-TETRACHLOROETHANE | EPA Method 8260 | ND ug/l | 1.00 ug/l | 05/18/01 | |
| * 1,3-DICHLOROBENZENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * 1,4-DICHLOROBENZENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| * 1,2-DICHLOROBENZENE | EPA Method 8260 | ND ug/l | 5.00 ug/l | 05/18/01 | |
| UNKNOWN | EPA 8260 Library Search | 5.79 J ug/l | | 05/18/01 | |
| * CYANIDE, TOTAL | SW846 Method 9010/9014 | ND mg/l | 0.0500 mg/l | 05/18/01 | |
| PETROLEUM HYDROCARBONS | EPA 600 Method 418.1 | 42200 mg/l | 0.500 mg/l | 05/21/01 | |

L761423-1:

1. Due to the large amount of oil, additional Freon was used to extract the sample for petroleum hydrocarbons.

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the RLs.

QC INC's laboratory certification ID's are: PADER 09-131; NJDEP Southampton 77166, Wind Gap 77001. Alltest 02015 additional states upon request.

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(b) (4)

1205 Industrial Blvd., P.O. Box 514, Southampton, PA 18966-0514 Phone: 215-355-3900 Fax: 215-355-7231

APPENDIX 6

PHILADELPHIA WATER DEPARTMENT ANALYTICAL DATA (River Samples)

*Sampling and analysis by Philadelphia Water Department (PWD)
(provided by PWD to DEP)*

VOCs Report (unit-ppb ug/L)

| Operator | Kan | | Flat Rock Dam Schuyl. Riv. 476- Bridge 6903 Flat Rock Dam | | | |
|---|--------------|---------------|---|--------------------|--------------|--------------|
| Sequence date | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/17/2001 | 5/17/2001 |
| Collection date | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/17/2001 | 5/16/2001 | 5/16/2001 |
| Collection time | 9.15 am | 8.45am | 12.20pm | 8.20 am | 11.10am | |
| Sample Name | QL Intake | Flat Rock Dam | Schuyl. Riv. 476- Bridge | 6903 Flat Rock Dam | | |
| dichlorodifluoromethane | not reported | not reported | not reported | not reported | not reported | not reported |
| chloromethane | not reported | not reported | not reported | not reported | not reported | not reported |
| vinyl chloride | not reported | not reported | not reported | not reported | not reported | not reported |
| bromomethane | not reported | not reported | not reported | not reported | not reported | not reported |
| chloroethane | not reported | not reported | not reported | not reported | not reported | not reported |
| trichlorofluoromethane | not reported | not reported | not reported | not reported | not reported | not reported |
| acetone | not reported | not reported | not reported | not reported | not reported | not reported |
| ethyl ether | <0.5 | <0.5 | not reported* | not reported | not reported | <0.5 |
| 1,1-dichloroethene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| iodomethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-propenenitrile(acrylonitrile) | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 3-chloropropene(allyl chloride) | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| methylene chloride | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| carbon disulfide | <0.5 | <0.5 | 0.65 | <0.5 | <0.5 | <0.5 |
| methyl-t-butyl ether | 0.97 | 1.25 | 0.75 | 1.26 | 1.39 | |
| t-1,2-dichloroethene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,1-dichloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| propanenitrile(propionitrile) | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| methyl ethyl ketone(2butanone) | not reported | not reported | not reported** | not reported | not reported | not reported |
| 2-methyl-2-propenenitrile(methacrylonit | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| c-1,2-dichloroethene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| methyl acrylate | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 2,2-dichloropropane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| chloroform | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| bromochloromethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| tetrahydrofuran | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,1,1-trichloroethane | <0.5 | <0.5 | 0.65 | <0.5 | <0.5 | <0.5 |
| chlorobutane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2-dichloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,1-dichloropropene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| carbon tetrachloride | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

| Operator | Kan | | | |
|---------------------------|-----------|---------------|--------------------------|--------------------|
| Sequence date | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/17/2001 |
| Collection date | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/16/2001 |
| Collection time | 9.15 am | 8.45am | 12.20pm | 8.20 am |
| Sample Name | QL Intake | Fiat Rock Dam | Schuyl. Riv. 476- Bridge | 6903 Fiat Rock Dam |
| benzene | <0.5 | <0.5 | <0.5 | <0.5 |
| chloroacetonitrile | <0.5 | <0.5 | <0.5 | <0.5 |
| trichloroethene | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2-dichloropropane | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-nitropropane | <0.5 | <0.5 | <0.5 | <0.5 |
| methyl methacrylate | <0.5 | <0.5 | <0.5 | <0.5 |
| dibromomethane | <0.5 | <0.5 | <0.5 | <0.5 |
| bromodichloromethane | <0.5 | <0.5 | <0.5 | <0.5 |
| methyl isobutyl ketone | <0.5 | <0.5 | 5.65 | <0.5 |
| 1,1-dichloro-2-propanone | <0.5 | <0.5 | 12.65 | <0.5 |
| c-1,3-dichloropropene | <0.5 | <0.5 | <0.5 | <0.5 |
| t-1,3-dichloropropene | <0.5 | <0.5 | <0.5 | <0.5 |
| toluene | <0.5 | <0.5 | 1.12 | <0.5 |
| ethyl methacrylate | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,1,2-trichloroethane | <0.5 | <0.5 | <0.5 | <0.5 |
| 2-hexanone | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,3-dichloropropane | <0.5 | <0.5 | <0.5 | <0.5 |
| dibromochloromethane | <0.5 | <0.5 | <0.5 | <0.5 |
| tetrachloroethene | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2-dibromoethane | <0.5 | <0.5 | <0.5 | <0.5 |
| chlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,1,1,2-tetrachloroethane | <0.5 | <0.5 | <0.5 | <0.5 |
| ethylbenzene | <0.5 | <0.5 | <0.5 | <0.5 |
| m- & p--xylenes, 2-106 | <0.5 | <0.5 | <0.5 | <0.5 |
| styrene | <0.5 | <0.5 | 0.53 | <0.5 |
| o-xylene | <0.5 | <0.5 | <0.5 | <0.5 |
| bromoform | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,1,2,2-tetrachloroethane | <0.5 | <0.5 | <0.5 | <0.5 |
| cumene(isopropylbenzene) | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2,3-trichloropropane | <0.5 | <0.5 | <0.5 | <0.5 |
| t-1,4-dichloro-2-butene | <0.5 | <0.5 | <0.5 | <0.5 |
| bromobenzene | <0.5 | <0.5 | <0.5 | <0.5 |

| Operator | Kan | | | | |
|------------------------------|-----------|---------------|-------------------------|--------------------|-----------|
| Sequence date | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/17/2001 |
| Collection date | 5/16/2001 | 5/16/2001 | 5/16/2001 | 5/17/2001 | 5/16/2001 |
| Collection time | 9.15 am | 8.45am | 12.20pm | 8.20 am | 11.10am |
| Sample Name | QL Intake | Flat Rock Dam | Schuyl.Riv. 476- Bridge | 6903 Flat Rock Dam | |
| propylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| o-chlorotoluene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| p-chlorotoluene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,3,5-trimethylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| pentachloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| t-butylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2,4-trimethylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| sec-butylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,3-dichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| p-cymene(p-isopropyltoluene) | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,4-dichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2-dichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| butylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| hexachloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2-dibromo-3-chloropropane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| nitrobenzene | <0.5 | <0.5 | 1.23 | <0.5 | <0.5 |
| 1,2,4-trichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| naphthalene | <0.5 | <0.5 | 2.2 | <0.5 | <0.5 |
| hexachlorobutadiene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| 1,2,3-trichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

Note:- *Not reported but noticed acetone, estimated at <0.1 ppm. Suspected to be from glassware cleaning.

**Not reported but estimated at <0.05 ppm

APPENDIX 7

PADEP ANALYTICAL DATA CANAL AND RIVER SAMPLES May 16 and 17, 2001

**PARTIAL RESULTS OF WATER SAMPLES
ANALYSIS (results available as of
Thursday, May 24, 2001)**

**SAMPLES TAKEN BY D.E.P. ON WEDNESDAY
5/16 AND THURSDAY 5/17**

05/24/2001 08:30:36 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0120 259 05/16/2001

Status: IN PROCESS

Collector: David Burke

Collected: 05/16/2001 01:30:00 PM

County: Montgomery

State: PA

Municipality: Bridgeport Boro

Location: Bridgeport Canal, 300 feet downstream of Ford Street

Reason: Routine Sampling

Fire-fighting runoff water was sampled from the canal. The sample was collected from below the water surface, so as to prevent the entry of floating oil into the sample bottles.

Appearance: Turbid and oily.

Laboratory Sample ID: I2001023457
Standard Analysis: 100

IN PROCESS

| Test/CAS# - Description | Reported Results | Completed |
|-------------------------|-----------------------------|------------|
| 00340 COD | Cancelled | 05/18/2001 |
| ** Comment ** | No Separate Sample Received | |
| 00403 pH | 10.0 pH units | 05/17/2001 |
| 01002H ARSENIC T | <40 UG/L | 05/18/2001 |
| 01051H LEAD T | 318 UG/L | 05/18/2001 |
| 00310 BOD 5 DAY | 1151. MG/L | 05/22/2001 |
| 00530 T SUSP SOLID | 196 MG/L | 05/23/2001 |

✓ Sample collected from Bridgeport Canal, during heavy runoff of fire-fighting water.

12 data available as of 5/24/01

05/24/2001 12:30:35 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0120 259 05/16/2001

Status: COMPLETED

Collector: David Burke

Collected: 05/16/2001 01:30:00 PM

County: Montgomery

State: PA

Municipality: Bridgeport Boro

Location: Bridgeport Canal, 300 feet downstream of Ford Street

Reason: Routine Sampling

✓ Fire-fighting runoff water was sampled from the canal. The sample was collected from below the water surface, so as to prevent the entry of floating oil into the sample bottles.

Appearance: Turbid and oily.

Laboratory Sample ID: O2001003035

COMPLETED

Suite: VOA-1

The analyte naphthalene does not meet QC requirements.

| Test/CAS# - Description | Reported Results | Completed |
|------------------------------------|------------------|------------|
| 1634044 Methyl Tert-Butyl Ether | 3.0 UG/L | 05/22/2001 |
| 91203 Naphthalene | 116 UG/L (E) | 05/22/2001 |
| 95476 o-Xylene | 12.6 UG/L (Q) | 05/22/2001 |
| 71432 Benzene | 39.7 UG/L | 05/22/2001 |
| 100425 Styrene | 13.2 UG/L (Q) | 05/22/2001 |
| 108883 Toluene | 95.6 UG/L (Q) | 05/22/2001 |
| 108054 Vinyl Acetate | 0.50 UG/L (U) | 05/22/2001 |
| 79345 1,1,2,2-Tetrachloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 79005 1,1,2-Trichloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 120821 1,2,4-Trichlorobenzene | 10.0 UG/L (U) | 05/22/2001 |
| 96128 1,2-Dibromo-3-chloropropane | 0.50 UG/L (U) | 05/22/2001 |
| 75014 Chloroethene | 0.50 UG/L (U) | 05/22/2001 |
| 106467 1,4-Dichlorobenzene | 0.50 UG/L (U) | 05/22/2001 |
| 10061015 cis-1,3-Dichloropropene | 0.50 UG/L (U) | 05/22/2001 |
| 10061026 trans-1,3-Dichloropropene | 0.50 UG/L (U) | 05/22/2001 |
| 103651 n-Propylbenzene | 0.94 UG/L | 05/22/2001 |
| 104518 n-Butylbenzene | 2.0 UG/L (U) | 05/22/2001 |
| 108678 1,3,5-Trimethylbenzene | 2.1 UG/L | 05/22/2001 |
| 108861 Bromobenzene | 0.50 UG/L (U) | 05/22/2001 |
| 109999 Tetrahydrofuran | 29.5 UG/L (BQ) | 05/22/2001 |
| 124481 Dibromochloromethane | 0.50 UG/L (U) | 05/22/2001 |
| 156592 cis-1,2-Dichloroethene | 0.50 UG/L (U) | 05/22/2001 |
| 541731 1,3-Dichlorobenzene | 0.50 UG/L (U) | 05/22/2001 |

05/24/2001 12:30:35 AM

 DEP Bureau of Laboratories
 Analytical Report For
 Water Quality Protection

Page: 002

Sample ID: 0120 259 05/16/2001

Status: COMPLETED

| Test/CAS# - Description | Reported Results | Completed |
|----------------------------------|------------------|------------|
| 591786 2-Hexanone | 2.2 UG/L (J) | 05/22/2001 |
| 594207 2,2-Dichloropropane | 0.50 UG/L (U) | 05/22/2001 |
| 75252 Bromoform | 0.50 UG/L (U) | 05/22/2001 |
| 630206 1,1,1,2-Tetrachloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 67641 Acetone | 1720 UG/L (Q) | 05/22/2001 |
| 74953 Dibromomethane | 0.50 UG/L (U) | 05/22/2001 |
| 75274 Bromodichloromethane | 0.69 UG/L | 05/22/2001 |
| 75694 Trichlorofluoromethane | 1.0 UG/L (U) | 05/22/2001 |
| 75718 Dichlorodifluoromethane | 0.50 UG/L (U) | 05/22/2001 |
| 87616 1,2,3-Trichlorobenzene | 10.0 UG/L (U) | 05/22/2001 |
| 95498 o-Chlorotoluene | 4.6 UG/L | 05/22/2001 |
| 95501 1,2-Dichlorobenzene | 0.50 UG/L (U) | 05/22/2001 |
| 95636 1,2,4-Trimethylbenzene | 6.6 UG/L | 05/22/2001 |
| 96184 1,2,3-Trichloropropane | 0.50 UG/L (U) | 05/22/2001 |
| 99876 4-Isopropyltoluene | 0.43 UG/L (J) | 05/22/2001 |
| 74839 Bromomethane | 72.2 UG/L (Q) | 05/22/2001 |
| 78933 MEK | 5360 UG/L | 05/22/2001 |
| 75003 Chloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 74873 Chloromethane | 0.50 UG/L (U) | 05/22/2001 |
| 106434 p-Chlorotoluene | 0.50 UG/L (U) | 05/22/2001 |
| 75150 Carbon Disulfide | 97.6 UG/L (Q) | 05/22/2001 |
| 75343 1,1-Dichloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 107062 1,2-Dichloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 75354 1,1-Dichloroethene | 0.50 UG/L (U) | 05/22/2001 |
| 156605 trans-1,2-Dichloroethene | 0.50 UG/L (U) | 05/22/2001 |
| 75092 Methylene Chloride | 17.3 UG/L (Q) | 05/22/2001 |
| 78875 1,2-Dichloropropane | 0.50 UG/L (U) | 05/22/2001 |
| 142289 1,3-Dichloropropane | 0.50 UG/L (U) | 05/22/2001 |
| 98066 Tert-Butylbenzene | 0.50 UG/L (U) | 05/22/2001 |
| 100414 Ethylbenzene | 13.8 UG/L (Q) | 05/22/2001 |
| 56235 Carbon Tetrachloride | 0.50 UG/L (U) | 05/22/2001 |
| 98828 Isopropylbenzene | 0.71 UG/L | 05/22/2001 |
| 108101 MIBK | 978 UG/L (Q) | 05/22/2001 |
| 135988 Sec-Butylbenzene | 3.7 UG/L | 05/22/2001 |
| 127184 Tetrachloroethene | 16.6 UG/L (Q) | 05/22/2001 |
| 71556 1,1,1-Trichloroethane | 0.50 UG/L (U) | 05/22/2001 |
| 79016 Trichloroethene | 0.50 UG/L (U) | 05/22/2001 |
| 108383 m/p-Xylene | 35.8 UG/L (Q) | 05/22/2001 |
| 563586 1,1-Dichloropropene | 0.50 UG/L (U) | 05/22/2001 |
| 108907 Chlorobenzene | 0.50 UG/L | 05/22/2001 |
| 67663 Chloroform | 0.50 UG/L (U) | 05/22/2001 |
| 98566 PCTFB | 0.10 UG/L (U) | 05/22/2001 |
| 106934 1,2-Dibromoethane | 0.50 UG/L (U) | 05/22/2001 |

05/24/2001 12:30:35 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 003

Sample ID: 0120 259 05/16/2001

Status: COMPLETED

| Test/CAS# - Description | Reported Results | Completed |
|---------------------------|------------------|------------|
| 87683 Hexachlorobutadiene | 0.50 UG/L (U) | 05/22/2001 |

ORGANICS LABORATORY QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit is reported.
- J - Indicates an estimated value, below the quantification limit, but above the method detection limit.
- N - Indicates presumptive evidence of a compound.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- P - This flag is used with a target analyte when there is greater than a 25% difference between the results obtained from the primary and confirmation columns for dual column analysis methods. (ie, pesticides, triazines, PCB's, etc). The reported value is the average of the two results.
- Q - This flag identifies the average of multiple results from multiple analysis, or the average of the averages of dual column analysis methods.
- (Underline) - The compound is present at the amount reported. No flag.
- X - Non-target analytes co-elute with compound. Identification unable to be confirmed.

05/24/2001 08:32:10 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0109 154 05/17/2001

Status: IN PROCESS

Collector: Alan Everett

Collected: 05/17/2001 10:50:00 AM

County: NOT INDICATED

State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Routine Sampling

Laboratory Sample ID: I2001023742

IN PROCESS

Standard Analysis: 050

| Test/CAS# - Description | Reported Results | Completed |
|---|------------------|------------|
| 01002H ARSENIC T | <4.0 UG/L | 05/18/2001 |
| 01051H LEAD T | <1.0 UG/L | 05/18/2001 |
| 71900X MERCURY T | <1 UG/L | 05/18/2001 |
| 01032 CHROMIUM HEX | Cancelled | 05/21/2001 |
| ** Comment ** No Separate Sample Received | | |
| 32730D Phenols-Dist | 6.42 UG/L | 05/23/2001 |

Sample collected from Schuylkill River upstream of Continental Business Center (500 feet downriver from DeKalb Street Bridge).

UPSTREAM
1 of 3

05/24/2001 08:32:10 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0109 154 05/17/2001

Status: COMPLETED

Collector: Alan Everett

Collected: 05/17/2001 10:50:00 AM

County: NOT INDICATED

State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Routine Sampling

Laboratory Sample ID: O2001002142

COMPLETED

Suite: VOA-1

| Test/CAS# - Description | Reported Results | Completed |
|------------------------------------|------------------|------------|
| 1634044 Methyl Tert-Butyl Ether | 0.71 UG/L | 05/23/2001 |
| 91203 Naphthalene | 0.50 UG/L (U) | 05/23/2001 |
| 95476 o-Xylene | 0.50 UG/L (U) | 05/23/2001 |
| 71432 Benzene | 0.50 UG/L (U) | 05/23/2001 |
| 100425 Styrene | 0.50 UG/L (U) | 05/23/2001 |
| 108883 Toluene | 0.064 UG/L (J) | 05/23/2001 |
| 108054 Vinyl Acetate | 0.50 UG/L (U) | 05/23/2001 |
| 79345 1,1,2,2-Tetrachloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 79005 1,1,2-Trichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 120821 1,2,4-Trichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 96128 1,2-Dibromo-3-chloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 75014 Chloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 106467 1,4-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 10061015 cis-1,3-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 10061026 trans-1,3-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 103651 n-Propylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 104518 n-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108678 1,3,5-Trimethylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108861 Bromobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 109999 Tetrahydrofuran | 1.0 UG/L (U) | 05/23/2001 |
| 124481 Dibromochloromethane | 0.50 UG/L (U) | 05/23/2001 |
| 156592 cis-1,2-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 541731 1,3-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 591786 2-Hexanone | 2.5 UG/L (U) | 05/23/2001 |
| 594207 2,2-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 75252 Bromoform | 0.50 UG/L (U) | 05/23/2001 |
| 630206 1,1,1,2-Tetrachloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 67641 Acetone | 18.3 UG/L | 05/23/2001 |
| 74953 Dibromomethane | 0.50 UG/L (U) | 05/23/2001 |
| 75274 Bromodichloromethane | 0.50 UG/L (U) | 05/23/2001 |
| 75694 Trichlorofluoromethane | 0.50 UG/L (U) | 05/23/2001 |

upstream
2, 3

Sample ID: 0109 154 05/17/2001

Status: COMPLETED

| Test/CAS# - Description | Reported Results | Completed |
|---------------------------------|------------------|------------|
| 75718 Dichlorodifluoromethane | 0.50 UG/L (U) | 05/23/2001 |
| 87616 1,2,3-Trichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 95498 o-Chlorotoluene | 0.50 UG/L (U) | 05/23/2001 |
| 95501 1,2-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 95636 1,2,4-Trimethylbenzene | 0.064 UG/L (J) | 05/23/2001 |
| 96184 1,2,3-Trichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 99876 4-Isopropyltoluene | 0.50 UG/L (U) | 05/23/2001 |
| 74839 Bromomethane | 0.093 UG/L (JB) | 05/23/2001 |
| 78933 MEK | 2.5 UG/L (U) | 05/23/2001 |
| 75003 Chloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 74873 Chloromethane | 0.089 UG/L (J) | 05/23/2001 |
| 106434 p-Chlorotoluene | 0.50 UG/L (U) | 05/23/2001 |
| 75150 Carbon Disulfide | 0.50 UG/L (U) | 05/23/2001 |
| 75343 1,1-Dichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 107062 1,2-Dichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 75354 1,1-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 156605 trans-1,2-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 75092 Methylene Chloride | 0.50 UG/L (U) | 05/23/2001 |
| 78875 1,2-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 142289 1,3-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 98066 Tert-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 100414 Ethylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 56235 Carbon Tetrachloride | 0.50 UG/L (U) | 05/23/2001 |
| 98828 Isopropylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108101 MIBK | 2.5 UG/L (U) | 05/23/2001 |
| 135988 Sec-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 127184 Tetrachloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 71556 1,1,1-Trichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 79016 Trichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 108383 m/p-Xylene | 1.0 UG/L (U) | 05/23/2001 |
| 563586 1,1-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 108907 Chlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 67663 Chloroform | 0.50 UG/L (U) | 05/23/2001 |
| 98566 PCTFB | 0.50 UG/L (U) | 05/23/2001 |
| 106934 1,2-Dibromoethane | 0.50 UG/L (U) | 05/23/2001 |
| 87683 Hexachlorobutadiene | 0.50 UG/L (U) | 05/23/2001 |

upsmem
3 of 3

05/24/2001 08:32:34 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0109 155 05/17/2001

Status: IN PROCESS

Collector: Alan Everett

Collected: 05/17/2001 11:15:00 AM

State:

County: NOT INDICATED

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Emergency

Laboratory Sample ID: I2001023743
Standard Analysis: 050

IN PROCESS

| Test/CAS# - Description | Reported Results | Completed |
|---|------------------|------------|
| 01002H ARSENIC T | 10.4 UG/L | 05/18/2001 |
| 71900X MERCURY T | <1 UG/L | 05/18/2001 |
| 01032 CHROMIUM HEX | Cancelled | 05/21/2001 |
| ** Comment ** No Separate Sample Received | | |
| 01051H LEAD T | 52.0 UG/L | 05/21/2001 |
| 32730D Phenols+Dist | 120. UG/L | 05/23/2001 |

*Sample collected from Bridgeport Canal where it discharges to the Schuylkill River
(2000 feet east of Continental Business Center).*

*Canal Discharge
1 of 3*

05/24/2001 08:32:34 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0109 155 05/17/2001

Status: COMPLETED

Collector: Alan Everett

Collected: 05/17/2001 11:15:00 AM

County: NOT INDICATED

State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Emergency

Laboratory Sample ID: 02001002144

COMPLETED

Suite: VOA-1

| Test/CAS# - Description | Reported Results | Completed |
|------------------------------------|------------------|------------|
| 1634044 Methyl Tert-Butyl Ether | 1.6 UG/L | 05/23/2001 |
| 91203 Naphthalene | 33.4 UG/L (Q) | 05/23/2001 |
| 95476 o-Xylene | 3.4 UG/L | 05/23/2001 |
| 71432 Benzene | 3.9 UG/L | 05/23/2001 |
| 100425 Styrene | 4.5 UG/L | 05/23/2001 |
| 108883 Toluene | 15.3 UG/L (Q) | 05/23/2001 |
| 108054 Vinyl Acetate | 0.50 UG/L (U) | 05/23/2001 |
| 79345 1,1,2,2-Tetrachloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 79005 1,1,2-Trichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 120821 1,2,4-Trichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 96128 1,2-Dibromo-3-chloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 75014 Chloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 106467 1,4-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 10061015 cis-1,3-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 10061026 trans-1,3-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 103651 n-Propylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 104518 n-Butylbenzene | 0.36 UG/L (J) | 05/23/2001 |
| 108678 1,3,5-Trimethylbenzene | 0.76 UG/L | 05/23/2001 |
| 108861 Bromobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 109999 Tetrahydrofuran | 2.1 UG/L | 05/23/2001 |
| 124481 Dibromochloromethane | 1.0 UG/L | 05/23/2001 |
| 156592 cis-1,2-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 541731 1,3-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 591786 2-Hexanone | 0.34 UG/L (J) | 05/23/2001 |
| 594207 2,2-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 75252 Bromoform | 0.50 UG/L (U) | 05/23/2001 |
| 630206 1,1,1,2-Tetrachloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 67641 Acetone | 629 UG/L | 05/23/2001 |
| 74953 Dibromomethane | 0.50 UG/L (U) | 05/23/2001 |
| 75274 Bromodichloromethane | 2.0 UG/L | 05/23/2001 |
| 75694 Trichlorofluoromethane | 0.50 UG/L (U) | 05/23/2001 |

Canal Discharge
2 of 3

Sample ID: 0109 155 05/17/2001

Status: COMPLETED

| Test/CAS# - Description | Reported Results | Completed |
|---------------------------------|------------------|------------|
| 75718 Dichlorodifluoromethane | 0.50 UG/L (U) | 05/23/2001 |
| 87616 1,2,3-Trichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 95498 o-Chlorotoluene | 3.2 UG/L | 05/23/2001 |
| 95501 1,2-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 95636 1,2,4-Trimethylbenzene | 2.8 UG/L | 05/23/2001 |
| 96184 1,2,3-Trichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 99876 4-Isopropyltoluene | 0.14 UG/L (J) | 05/23/2001 |
| 74839 Bromomethane | 0.084 UG/L (JB) | 05/23/2001 |
| 78933 MEK | 151 UG/L (Q) | 05/23/2001 |
| 75003 Chloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 74873 Chloromethane | 0.14 UG/L (J) | 05/23/2001 |
| 106434 p-Chlorotoluene | 0.50 UG/L (U) | 05/23/2001 |
| 75150 Carbon Disulfide | 0.81 UG/L | 05/23/2001 |
| 75343 1,1-Dichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 107062 1,2-Dichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 75354 1,1-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 156605 trans-1,2-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 75092 Methylene Chloride | 1.7 UG/L (B) | 05/23/2001 |
| 78875 1,2-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 142289 1,3-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 98066 Tert-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 100414 Ethylbenzene | 2.3 UG/L | 05/23/2001 |
| 56235 Carbon Tetrachloride | 0.50 UG/L (U) | 05/23/2001 |
| 98828 Isopropylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108101 MIBK | 30.6 UG/L (Q) | 05/23/2001 |
| 135988 Sec-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 127184 Tetrachloroethene | 6.2 UG/L (Q) | 05/23/2001 |
| 71556 1,1,1-Trichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 79016 Trichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 108383 m/p-Xylene | 7.4 UG/L | 05/23/2001 |
| 563586 1,1-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 108907 Chlorobenzene | 0.11 UG/L (J) | 05/23/2001 |
| 67663 Chloroform | 4.4 UG/L | 05/23/2001 |
| 98566 PCTFB | 0.50 UG/L (U) | 05/23/2001 |
| 106934 1,2-Dibromoethane | 0.50 UG/L (U) | 05/23/2001 |
| 87683 Hexachlorobutadiene | 0.50 UG/L (U) | 05/23/2001 |

Cand Discharge
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05/24/2001 08:32:42 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 001

Sample ID: 0109 156 05/17/2001

Status: COMPLETED

Collector: Alan Everett

Collected: 05/17/2001 11:45:00 AM

County: NOT INDICATED

State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Emergency

Laboratory Sample ID: I2001023846

COMPLETED

Standard Analysis: 050

| Test/CAS# - Description | Reported Results | Completed |
|---|------------------|------------|
| 01002H ARSENIC T | <4.0 UG/L | 05/18/2001 |
| 01051H LEAD T | 1.3 UG/L | 05/18/2001 |
| 71900X MERCURY T | <1 UG/L | 05/18/2001 |
| 00927A MAGNESIUM T | 16.9 MG/L | 05/21/2001 |
| 01012A BERYLLIUM T | <1.0 UG/L | 05/21/2001 |
| 01027A CADMIUM T | <10.0 UG/L | 05/21/2001 |
| 01032A CHROMIUM HEX | Cancelled | 05/21/2001 |
| ** Comment ** No Separate Sample Received | | |
| 01034A CHROMIUM T | <50.0 UG/L | 05/21/2001 |
| 01042A COPPER T | <10.0 UG/L | 05/21/2001 |
| 01045A IRON T | 272.0 UG/L | 05/21/2001 |
| 01055A MANGANESE T | 103.0 UG/L | 05/21/2001 |
| 01067A NICKEL T | <50.0 UG/L | 05/21/2001 |
| 01092A ZINC T | 24.0 UG/L | 05/21/2001 |
| 01105A ALUMINUM T | <200.0 UG/L | 05/21/2001 |
| 32730D Phenols-Dist | 12.1 UG/L | 05/23/2001 |

✓ Sample collected from Schuylkill River downriver from Continental Business Center
(approximately 1.5 miles downstream of fire site).

Downstream
1 of 3

Sample ID: 0109 156 05/17/2001

Status: COMPLETED

Collector: Alan Everett

Collected: 05/17/2001 11:45:00 AM

County: NOT INDICATED

State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Emergency

Laboratory Sample ID: O2001002146

COMPLETED

Suite: VOA-1

| Test/CAS# - Description | Reported Results | Completed |
|------------------------------------|------------------|------------|
| 1634044 Methyl Tert-Butyl Ether | 0.67 UG/L | 05/23/2001 |
| 91203 Naphthalene | 0.50 UG/L (U) | 05/23/2001 |
| 95476 o-Xylene | 0.50 UG/L (U) | 05/23/2001 |
| 71432 Benzene | 0.50 UG/L (U) | 05/23/2001 |
| 100425 Styrene | 0.50 UG/L (U) | 05/23/2001 |
| 108883 Toluene | 0.31 UG/L (J) | 05/23/2001 |
| 108054 Vinyl Acetate | 0.50 UG/L (U) | 05/23/2001 |
| 79345 1,1,2,2-Tetrachloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 79005 1,1,2-Trichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 120821 1,2,4-Trichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 96128 1,2-Dibromo-3-chloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 75014 Chloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 106467 1,4-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 10061015 cis-1,3-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 10061026 trans-1,3-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 103651 n-Propylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 104518 n-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108678 1,3,5-Trimethylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108861 Bromobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 109999 Tetrahydropfuran | 1.0 UG/L (U) | 05/23/2001 |
| 124481 Dibromochloromethane | 0.50 UG/L (U) | 05/23/2001 |
| 156592 cis-1,2-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 541731 1,3-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 591786 2-Hexanone | 2.5 UG/L (U) | 05/23/2001 |
| 594207 2,2-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 75252 Bromoform | 0.50 UG/L (U) | 05/23/2001 |
| 630206 1,1,1,2-Tetrachloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 67641 Acetone | 27.0 UG/L (Q) | 05/23/2001 |
| 74953 Dibromomethane | 0.50 UG/L (U) | 05/23/2001 |
| 75274 Bromodichloromethane | 0.50 UG/L (U) | 05/23/2001 |
| 75694 Trichlorofluoromethane | 0.50 UG/L (U) | 05/23/2001 |

Downstream

2 y 3

05/24/2001 08:32:42 AM

DEP Bureau of Laboratories
Analytical Report For
Water Quality Protection

Page: 002

Sample ID: 0109 156 05/17/2001

Status: COMPLETED

| Test/CAS# - Description | Reported Results | Completed |
|---------------------------------|------------------|------------|
| 75718 Dichlorodifluoromethane | 0.50 UG/L (U) | 05/23/2001 |
| 87616 1,2,3-Trichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 95498 o-Chlorotoluene | 0.50 UG/L (U) | 05/23/2001 |
| 95501 1,2-Dichlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 95636 1,2,4-Trimethylbenzene | 0.065 UG/L (J) | 05/23/2001 |
| 96184 1,2,3-Trichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 99876 4-Isopropyltoluene | 0.50 UG/L (U) | 05/23/2001 |
| 74839 Bromomethane | 0.082 UG/L (JB) | 05/23/2001 |
| 78933 MEK | 1.2 UG/L (J) | 05/23/2001 |
| 75003 Chloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 74873 Chloromethane | 0.50 UG/L (U) | 05/23/2001 |
| 106434 p-Chlorotoluene | 0.50 UG/L (U) | 05/23/2001 |
| 75150 Carbon Disulfide | 0.50 UG/L (U) | 05/23/2001 |
| 75343 1,1-Dichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 107062 1,2-Dichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 75354 1,1-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 156605 trans-1,2-Dichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 75092 Methylene Chloride | 2.0 UG/L (J) | 05/23/2001 |
| 78875 1,2-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 142289 1,3-Dichloropropane | 0.50 UG/L (U) | 05/23/2001 |
| 98066 Tert-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 100414 Ethylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 56235 Carbon Tetrachloride | 0.50 UG/L (U) | 05/23/2001 |
| 98828 Isopropylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 108101 MIBK | 2.5 UG/L (U) | 05/23/2001 |
| 135988 Sec-Butylbenzene | 0.50 UG/L (U) | 05/23/2001 |
| 127184 Tetrachloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 71556 1,1,1-Trichloroethane | 0.50 UG/L (U) | 05/23/2001 |
| 79016 Trichloroethene | 0.50 UG/L (U) | 05/23/2001 |
| 108383 m/p-Xylene | 1.0 UG/L (U) | 05/23/2001 |
| 563586 1,1-Dichloropropene | 0.50 UG/L (U) | 05/23/2001 |
| 108907 Chlorobenzene | 0.50 UG/L (U) | 05/23/2001 |
| 67663 Chloroform | 0.50 UG/L (U) | 05/23/2001 |
| 98566 PCTFB | 0.50 UG/L (U) | 05/23/2001 |
| 106934 1,2-Dibromoethane | 0.50 UG/L (U) | 05/23/2001 |
| 87683 Hexachlorobutadiene | 0.50 UG/L (U) | 05/23/2001 |

Downstream
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APPENDIX 8

ANALYTICAL RESULT J-BUILDING BASEMENT WATER



1008 W. Ninth Avenue • King of Prussia, Pennsylvania 19406 (610) 337-9992 FAX (610) 337-9939

May 23, 2001

*BOB
KEUT
[Signature]*

(b) (4)

Lewis

(610) 292-8493

(b) (4)

LEWIS ENVIRONMENTAL GROUP
P.O. BOX 639
Royersford, PA 19468

RE: Bridgeport

Dear (b) (4)

Enclosed are the results of analyses for sample(s) received by the laboratory on May 22, 2001. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (4)

Project Manager

(b) (4)

*The TKN + Phenol will be available
tomorrow.*



1008 W. Ninth Avenue • King of Prussia, Pennsylvania 19406 (610) 337-8992 FAX (610) 337-8939

LEWIS ENVIRONMENTAL GROUP
P.O. BOX 639
Royersford, PA 19468

Project: Bridgeport
Project Number: NA
Project Manager: (b) (4)

Sampled: 5/22/01
Received: 5/22/01
Reported: 5/23/01 16:51

ANALYTICAL REPORT FOR SAMPLES:

| Sample Description | Laboratory Sample Number | Sample Matrix | Date Sampled |
|---------------------|--------------------------|---------------|--------------|
| 3837-basement water | K105396-01 | Water | 5/22/01 |

LA Laboratories, Inc

*The results in this report apply to the samples analyzed in accordance with the chain of custody document.
This analytical report must be reproduced in its entirety.*

(b) (4) Project Manager



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| | | | | |
|---------------------------|-----------------|------------|-----------|---------------|
| LEWIS ENVIRONMENTAL GROUP | Project | Bridgeport | Sampled: | 5/22/01 |
| P.O. BOX 639 | Project Number | NA | Received: | 5/22/01 |
| Royersford, PA 19468 | Project Manager | (b) (4) | Reported: | 5/23/01 16:51 |

Priority Pollutant Metals by EPA 6000/7000 Series Methods
GLA Laboratories, Inc

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|----------------------------|--------------|---------------|---------------|-------------------|-----------------|--------|--------------|--------|
| <u>3837-basement water</u> | | | | <u>K105396-01</u> | | | <u>Water</u> | |
| Arsenic | 1050296 | 5/23/01 | 5/23/01 | EPA 6010B | 0.030 | ND | mg/l | |
| Beryllium | " | " | " | EPA 6010B | 0.0040 | ND | " | |
| Cadmium | " | " | " | EPA 6010B | 0.0040 | 0.012 | " | |
| Chromium | " | " | " | EPA 6010B | 0.020 | 0.045 | " | |
| Copper | " | " | " | EPA 6010B | 0.010 | 0.54 | " | |
| Nickel | " | " | " | EPA 6010B | 0.050 | 0.090 | " | |
| Selenium | " | " | " | EPA 6010B | 0.050 | ND | " | |
| Silver | " | " | " | EPA 6010B | 0.010 | ND | " | |
| Zinc | " | " | " | EPA 6010B | 0.020 | 3.0 | " | |



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| | | | | |
|---------------------------|-----------------|------------|-----------|---------------|
| LEWIS ENVIRONMENTAL GROUP | Project | Bridgeport | Sampled: | 5/22/01 |
| P.O. BOX 639 | Project Number | NA | Received: | 5/22/01 |
| Royersford, PA 19468 | Project Manager | (b) (4) | Reported: | 5/23/01 16:51 |

Total Metals by EPA 6000/7000 Series Methods
GLA Laboratories, Inc

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|----------------------------|--------------|---------------|---------------|-------------------|-----------------|---------|--------------|--------|
| <u>1837-basement water</u> | | | | <u>K105396-01</u> | | | <u>Water</u> | |
| Antimony | 1050297 | 5/22/01 | 5/23/01 | EPA 7041 | 25.0 | 153 | ug/l | DILN |
| Lead | " | " | " | EPA 7421 | 100 | 620 | " | DILN |
| Mercury | 1050311 | 5/23/01 | " | EPA 7170A | 0.00100 | 0.00130 | mg/l | |
| Thallium | 1050297 | 5/22/01 | " | EPA 7841 | 2.00 | ND | ug/l | |



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LEWIS ENVIRONMENTAL GROUP
P.O. BOX 639
Royersford, PA 19468Project: Bridgeport
Project Number: NA
Project Manager: (b) (4)Sampled: 5/22/01
Received: 5/22/01
Reported: 5/23/01 16:51Tentatively Identified Compounds by GC/MS
GLA Laboratories, Inc

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|------------------------------------|--------------|---------------|---------------|--------------------------------|-----------------|--------|----------------------|--------|
| <u>1837-basement water</u> NONE | 1050287 | 5/22/01 | 5/22/01 | <u>K105396-01</u> EPA 8260B | 5.0 | ND | <u>Water</u> ug/l | |



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| | | |
|---------------------------|--------------------------|-------------------------|
| LEWIS ENVIRONMENTAL GROUP | Project: Bridgeport | Sampled: 5/22/01 |
| P.O. BOX 639 | Project Number: NA | Received: 5/22/01 |
| Royersford, PA 19468 | Project Manager: (b) (4) | Reported: 5/23/01 16:51 |

Volatile Organic Compounds by EPA Method 8260B
GLA Laboratories, Inc

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---------------------------------|--------------|---------------|-------------------|------------------|-----------------|--------|--------------|--------|
| <u>3837-basement water</u> | | | <u>K105396-01</u> | | | | <u>Water</u> | |
| Acetone | 1050287 | 5/22/01 | 5/22/01 | | 50 | 140 | ug/l | |
| Benzene | " | " | " | | 1.0 | 3.7 | " | |
| Bromodichloromethane | " | " | " | | 1.0 | ND | " | |
| Bromoform | " | " | " | | 2.0 | ND | " | |
| Bromomethane | " | " | " | | 2.0 | ND | " | |
| 2-Butanone | " | " | " | | 10 | 55 | " | |
| Carbon disulfide | " | " | " | | 2.0 | 2.3 | " | |
| Carbon tetrachloride | " | " | " | | 2.0 | ND | " | |
| Chlorobenzene | " | " | " | | 2.0 | ND | " | |
| Chlorodibromomethane | " | " | " | | 2.0 | ND | " | |
| Chloroethane | " | " | " | | 2.0 | ND | " | |
| Chloroform | " | " | " | | 2.0 | 3.0 | " | |
| Chloromethane | " | " | " | | 2.0 | ND | " | |
| 1,1-Dichloroethane | " | " | " | | 2.0 | ND | " | |
| 1,2-Dichloroethane | " | " | " | | 2.0 | ND | " | |
| 1,1-Dichloroethene | " | " | " | | 2.0 | ND | " | |
| cis-1,2-Dichloroethene | " | " | " | | 2.0 | ND | " | |
| trans-1,2-Dichloroethene | " | " | " | | 2.0 | ND | " | |
| 1,2-Dichloropropane | " | " | " | | 2.0 | ND | " | |
| cis-1,3-Dichloropropene | " | " | " | | 2.0 | ND | " | |
| trans-1,3-Dichloropropene | " | " | " | | 2.0 | ND | " | |
| Ethylbenzene | " | " | " | | 2.0 | ND | " | |
| 2-Hexanone | " | " | " | | 10 | ND | " | |
| Methylene chloride | " | " | " | | 5.0 | ND | " | |
| 4-Methyl-2-pentanone | " | " | " | | 10 | ND | " | |
| Methyl tert-butyl ether | " | " | " | | 2.0 | ND | " | |
| Styrene | " | " | " | | 2.0 | ND | " | |
| 1,1,2,2-Tetrachloroethane | " | " | " | | 2.0 | ND | " | |
| Tetrachloroethene | " | " | " | | 1.0 | ND | " | |
| Toluene | " | " | " | | 2.0 | 3.2 | " | |
| 1,1,1-Trichloroethane | " | " | " | | 2.0 | ND | " | |
| 1,1,2-Trichloroethane | " | " | " | | 2.0 | ND | " | |
| Trichloroethene | " | " | " | | 1.0 | ND | " | |
| Trichlorofluoromethane | " | " | " | | 2.0 | ND | " | |
| Vinyl chloride | " | " | " | | 2.0 | ND | " | |
| p,m-Xylene | " | " | " | | 4.0 | ND | " | |
| o-Xylene | " | " | " | | 2.0 | ND | " | |
| Surrogate: Dibromofluoromethane | | | | 8/1-12/11 | | 98 | % | |

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*Refer to end of report for text of notes and definitions.



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| | | |
|---------------------------|--------------------------|-------------------------|
| LEWIS ENVIRONMENTAL GROUP | Project: Bridgeport | Sampled: 5/22/01 |
| P.O. BOX 639 | Project Number: NA | Received: 5/22/01 |
| Royersford, PA 19468 | Project Manager: (b) (4) | Reported: 5/23/01 16:51 |

Volatile Organic Compounds by EPA Method 8260B
GLA Laboratories, Inc

| Analyte | Batch Number | Date Prepared | Date Analyzed | Surrogate Limits | Reporting Limit | Result | Units | Notes |
|--|--------------|---------------|---------------|-------------------|-----------------|--------|--------------|-------|
| <u>3837-basement water (continued)</u> | | | | <u>K105396.01</u> | | | <u>Water</u> | |
| Surrogate: 1,2-Dichloroethane-d4 | 1050287 | 5/22/01 | 5/22/01 | 70-120 | | 98 | % | |
| Surrogate: Toluene-d8 | " | " | " | 70-120 | | 98 | " | |
| Surrogate: 4-Bromofluorobenzene | " | " | " | 80-120 | | 98 | " | |



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LEWIS ENVIRONMENTAL GROUP

P.O. BOX 639

Royersford, PA 19468

Project: Bridgeport

Project Number: NA

Project Manager: (b) (4)

Sampled: 5/22/01

Received: 5/22/01

Reported: 5/23/01 16:51

General Chemistry
GLA Laboratories, Inc

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes |
|----------------------------------|-----------------|------------------|------------------|--------------------------------|--------------------|--------|--------------------------|-------|
| <u>3837-basement water</u> pH | 1050323 | 5/22/01 | 5/22/01 | <u>K105396-01</u> EPA 9040B | | 8.54 | <u>Water</u> pH Units | 1 |



1008 W. Ninth Avenue • King of Prussia, Pennsylvania 19406 • (610) 337-9992 FAX (610) 337-9939

LEWIS ENVIRONMENTAL GROUP
P.O. BOX 639
Royersford, PA 19468

Project Bridgeport
Project Number NA
Project Manager (b) (4)

Sampled: 5/22/01
Received: 5/22/01
Reported: 5/23/01 16:51

Notes and Definitions

| # | Note |
|---|------|
|---|------|

| | |
|---|---------------------|
| 1 | Analyzed at 3:30 PM |
|---|---------------------|

| | |
|------|--|
| DILN | Due to matrix interference and or sample dilution the detection limits for this sample have been elevated. |
|------|--|

| | |
|-----|------------------|
| DET | Analyte DETECTED |
|-----|------------------|

| | |
|----|--|
| ND | Analyte NOT DETECTED at or above the reporting limit |
|----|--|

| | |
|----|--------------|
| NR | Not Reported |
|----|--------------|

| | |
|-----|---|
| dry | Sample results reported on a dry weight basis |
|-----|---|

| | |
|--------|----------|
| Recov. | Recovery |
|--------|----------|

| | |
|-----|-----------------------------|
| RPD | Relative Percent Difference |
|-----|-----------------------------|

The Reporting Limit stated is based on a calculation derived from the Method Detection Limit Study.

The Reporting Limit may not represent the lowest point on the calibration curve.

GLA Laboratories, Inc

(b) (4) Project Manager

GLA Laboratories, Inc Work Order **K105396**

Project/Client Information

| | | |
|--|--|---|
| Submitted By LEWIS ENVIRONMENTAL GROUP | Report To LEWIS ENVIRONMENTAL GROUP (b) (4) P.O. BOX 639 Royersford, PA 19468 | Invoice To LEWIS ENVIRONMENTAL GROUP (b) (4) P.O. BOX 639 Royersford, PA 19468 |
| Project Name Bridgeport | | |
| Project Number NA | Phone: 610-495-6695 Fax: 610-495-6697 | Phone: 610-495-6695 Fax: 610-495-6697 |

Work Order Information

| | | |
|---|-----------------------------------|--------------------------------|
| Project Manager (b) (4) | Received 5/22/01 12:03 | Received By (b) (4) |
| Report TAT - Due 1 day(s) - 5/23/01 | Logged In 5/22/01 12:26 | Logged In By (b) (4) |

Work Order Comments

Please fax and mail results

Containers are unbroken.
Sample labels/COC agree.
Samples preserved properly.
Samples Received at 3°C

Sample/Analysis Information

| Lab Number | Sample Name | Matrix | Sampled/ Expires | Analysis Requested | Due | RTA T | Comments |
|------------|---------------------|--------|---------------------|---------------------|---------|----------|----------|
| 105396-01 | 3837-basement water | Water | 5/22/01 | | | | |
| | | | 6/5/01 | 8260 | 5/23/01 | 1 | |
| | | | 6/5/01 | 8260 TICS | 5/23/01 | 1 | |
| | | | 5/23/01 | pH water 9040 | 5/23/01 | 1 | |
| | | | 6/19/01 | Phenols-420.2 | 5/23/01 | 1 | |
| | | | 6/19/01 | Priority Metals H2O | 5/23/01 | 1 | |
| | | | 6/19/01 | TKN-351.2 | 5/23/01 | 1 | |

Reviewed By 



1008 W. Ninth Avenue • King of Prussia, Pennsylvania 19406 (610) 337-9992 FAX (610) 337-9939

LEWIS ENVIRONMENTAL GROUP
P.O. BOX 639
Royersford, PA 19468Project: Bridgeport
Project Number: NA
Project Manager: (b) (4)Sampled: 5/22/01
Received: 5/22/01
Reported: 5/24/01 16:57General Chemistry
Great Lakes Analytical

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method | Reporting Limit | Result | Units | Notes* |
|-------------------------|--------------|---------------|---------------|-----------------|-----------------|--------|-------|--------|
| 1837-basement water | | | | K105396-01 | | | Water | 2 |
| Total Kjeldahl Nitrogen | 1050493 | 5/23/01 | 5/24/01 | EPA 351.2 | 0.200 | 2.99 | mg/l | |
| Phenol | 1050529 | - | - | EPA 420.2 | 0.150 | 0.820 | - | G1 |

(b) (4)

APPENDIX 9

ASSESSMENT DOCUMENT “POST-FIRE INCIDENT” SITE ASSESSMENT

Continental Business Complex Bridgeport, PA

Post-Fire Incident

Site Assessment

05-31-01

Prepared by:

CWO Leo Deon, USCG Atlantic Strike Team

BM1 Pat McNeilly, USCG Atlantic Strike Team

Mike Towle, EPA

Bob Kelly, EPA

05-31-01

On May 18, 2001, the EPA On-Scene Coordinator (OSC) initiated an assessment of potential environmental or safety issues resulting from fire or building collapse at the Continental Business Center in Bridgeport, PA. Dozens of structures were affected by a large fire beginning 16 May 01. Several of the buildings in the business center contained moderate or large amounts of hazardous substances or oily materials. When fire damaged the containers for these materials and fire-fighting waters (or subsequent precipitation events) enabled these materials to migrate, the environmental and public health was potentially threatened. On 16 and 17 May, contractors undertook significant efforts to contain and remove oily material that migrated from the fire scene to the Schuylkill River and a canal which flowed under the business complex. Additional effort was, however, necessary to characterize other potential threats posed by the Site.

The OSC interviewed the owner of the business complex and other knowledgeable personnel as well as surveyed the fire scene. In addition to the identification of more routine potential hazards (machinery, uneven surfaces, pooled waters, sharp objects, structural hazards, and overhead hazards), it was apparent that several locations within the complex contained additional suspect items (e.g., drums, cylinders, containers) that would warrant specific attention and potential removal prior to demolition or other activity to remove the fire damage.

The OSC directed members of the US Coast Guard Atlantic Strike Team to assist the OSC with identification of specific potential environmental or safety hazards posed by individual structures or businesses involved in the fire. Strike Team members and OSCs Towle and Kelly individually assessed structures and then combined the efforts in this document. This "Post-Fire Incident Site Assessment" focused solely upon the potential threats visible from external or otherwise safe locations at each structure or business. This document contains a summary of the items identified at each location and specific photo-documentation. All potential hazards may not be identified in this summary document.

Areas with potential environmental or safety hazards should be specifically addressed to avoid mixing of potentially hazardous items with the bulk construction/demolition debris at each location.

This document was provided to the owner to ensure that appropriate environmental consideration is part of future demolition/dismantlement plans.

In addition to minor items as noted in the following pages, particular attention is necessary at the following buildings:

(1) Buildings C-101/111/115 : Cleanup activity is needed at this location due to the large amount of oily material that may contaminate the debris, the large amount of containers that may contain residual materials, and the oily releases that cause oily discharge to nearby storm drains and Schuylkill River. It is probable that much of the debris in this area will be classified as a residual waste. Care should be taken to avoid mixing potentially clean items (e.g., walls) that may remain in this area. Dikes, berms, covers, and decontamination are necessary to stop continuing oily discharges to the storm drains and River. Recyclable materials in this area may need gross decontamination.

(2) Building C-127 : Several drums in this building area should be removed before demolition as well as limited areas of unknown releases (e.g., yellow powder). An area along the west wall

appeared to hold some liquid and should be examined as a potential sump of potentially contaminated liquid. Cylinders in this area should be removed.

(3) Building H: This building poses several potential environmental and safety hazards. A large amount of possible asbestos-containing material is located in this structure. Some of the possible ACM is in poor condition. A large number of drums and containers are present in this building. The building also apparently drains into the River through a basement drain system. Hazardous materials and ACM should be removed from this building before any demolition or dismantlement.

(4) Building J : The water that pools in building J was found to contain elevated levels of lead and some other contaminants. This water migrates to the Schuylkill River through drainage system. Potentially contaminated materials in this building will drain to the River.


(5) Buildings C-119/123, 131, 147,158/168, 165, 177, and 185 each have small amounts of suspect containers that should be removed.

(6) Building M17 : Cleanup activity is needed at this location due to the large amount of oily material that may contaminate the debris, the large amount of containers that may contain residual materials, and the oily releases that cause oily discharge to nearby storm drains and canal. It is probable that much of the debris in this area will be classified as a residual waste. Care should be taken to avoid mixing potentially clean items (e.g., walls) that may remain in this area. Dikes, berms, covers, and decontamination are necessary to stop continuing oily discharges to the storm drains and canal. Recyclable materials in this area may need gross decontamination.

(7) Building M101: Cleanup activity is underway at this location. However, much of the remaining debris may contain residual contamination necessitating decontamination or disposal. Additionally, the basement area of M101 contains chemicals that have migrated from the first floor. The basement also appears to contain residual materials from historical operations. The materials in the basement drain into the canal (or other locations) through unknown pathways. Unless these materials are addressed, the basement poses a continuing environmental threat.

(8) the possibility of PCB contaminated debris should be evaluated at Building G before this building is demolished.

(9) the location of ACM throughout the facility should be evaluated before demolition causes releases or mixing of wastestreams.


Michael Toole
EPA OSC
31 May 01

C-101/C-111/115: George Auto Supply

- ☐ Four (04) 48FT Box Trailers with:
 - Aerosols Cans-Unknown Material
 - Shock Absorbers
 - Oil Filters
 - Turtle Wax Car Wash in Plastic Bottles
 - Brake Drums
 - Brake Rotors
 - Brake Pads
 - Brake Shoes
 - Freon Cylinders Expended
 - Paste Wax in Plastic Containers
 - Anti-Freeze Containers-Plastic
 - De-Greasers (Unknown Manufactures)
 - Oil Absorbent-Bulk
- ☐ 55 & 35 Gallon Drums
- ☐ Aerosol Cans
- ☐ Freon Cylinders-Small
- ☐ Freon Cylinders-Large
- ☐ Large Quantity of 1-Gallon Cans-Unknown Material
- ☐ 3-200 Gallon Holding Tanks-unknown Contents
- ☐ 8-5 Gallon Metal Containers-unknown Contents
- ☐ Oily runoff to river and to drains
- ☐ Oily in rear pavement
- ☐ Oily in front pavement

C-119/123: Label Rite, Inc. (Partial George Auto Supply)

- ☐ Gray powder on floor
- ☐ Numerous 5 gallon containers

C-127: MCC Inc.

- ☐ Approx 25-55 Gallon Drums, open top and closed, -Unknown Material (Possibly Aluminum Oxide)
- ☐ Unknown drain / Sump west wall
- ☐ Phosphoric Acid? In 5 gallon pails, moved to staging
- ☐ Yellow Powder
- ☐ Cylinders

C-131: Salmons Industries, Inc.

- ☐ Heavy Industrial Equipment
- ☐ Unknown Drum
- ☐ Drum with solid
- ☐ Approximately six cylinders
- ☐ Numerous drums (empty – open top, some oily)

C-135: League Collegiate Wear, Inc.

- ☐ No Specific environmental issues

C-141: Unknown Facility Name

- ☐ No Specific environmental issues

C-146: Panther Products East

- ☐ No Specific environmental issues

C-147: Main Line Lawn Service, Inc.

- ☐ 1-200 Gallon Tank-Unknown Material
- ☐ 3-55 Gallon Drums-Unknown Material
- ☐ Numerous small containers
- ☐ 1 Flatbed Truck-Inoperable
- ☐ 1 Small Dump Truck-Inoperable
- ☐ 2 Vehicles outside North Loading area-Inoperable
- ☐ Possible pesticides

C-150: M. L. Floor Covering

- ☐ Forklift on Loading Dock
- ☐ Large Quantity of Small Industrial Equipment
- ☐ Carpet
- ☐ No Specific environmental issues

C-151: Keystone Supply

- ☐ General Office Material
- ☐ Empty Metal Shelving
- ☐ Industrial supply and safety equipment
- ☐ No Specific environmental issues

C-158/C-168: Penncora Productions, Inc.

- ☐ 5-55 Gallon Drums-Unknown Material

C-165: Sherman-Gosweiler

- ☐ Moderate Weight Industrial Equipment
- ☐ Cabinet / Carpentry shop
- ☐ Numerous gallon and 5 gallon cans
- ☐ Some drums
- ☐ Organic odor on west end

C-174: Pergamon Corporation

- ☐ No Specific environmental issues

C-177: Restoration Station

- ☐ Furniture stripping
- ☐ Numerous gallon cans and some drums

C-178: Tech - Pac

- ☐ General Office Equipment
- ☐ Wire Spools
- ☐ No Specific environmental issues

C-185: Valley Forge Candle Co.

- ☐ Approx 10-3 Gallon Metal Containers-Unknown Material
- ☐ 1-55 Gallon Drum-Unknown Material
- ☐ Abundance of Approx 6 Ounce Metal Candle Containers
- ☐ Wax on Floor

C-188: U.S. Equipment Brokers, Inc.

- ☐ General Office Material

C-191: Wire crafters, Inc.

- ☐ Welding and painting supplies

C-193/C-201: A.R.B. Breadcrumbs

- ☐ General Office Material
- ☐ Some small containers
- ☐ Drain between 193 and 201
- ☐ No Specific environmental issues
- ☐ Basement Drain C-201

C-198: Sweetzels Cookies

- ☐ 9-Pallets of Vegetable Shortening (50 Lb Single Cubes)
- ☐ Large Mixing Equipment
- ☐ Plastic Storage Containers-Unknown Material
- ☐ Flour/Flour Residue
- ☐ Large Quantity Bread-Opened
- ☐ Large Quantity Bread-Plastic Wrapped
- ☐ Cookies-Palletized & Partially Broken Open
- ☐ Pallets of Wafers, Crackers, Cookies-Boxed and Wrapped
- ☐ Weight Moving/Handling Equipment
- ☐ Foul Smell

H – Boiler House

- ☐ Muriatic acid (poly containers)
- ☐ 55 Gal Drums Corrosives
- ☐ Pallets of Brake shoes
- ☐ 5 Gal Buckets Unknowns
- ☐ 55 Gal Drums of Sludge
- ☐ 55 Gal Drums of Unknowns
- ☐ Asbestos Wrapped Pipes / on the floor
- ☐ 1 Gal Cans of paints and Thinners
- ☐ 30 Gal Poly Drums
- ☐ Basement & Drains to River?

J-Buildings

- ☐ Basement Passes Water to River. Water Quality was Suspect. (Lead)

M-11: Brunner & Lay, Inc.

- ☐ Mining/Construction tools

M-13: Dovar Mechanical, Inc.

M-15: Unknown Facility Name

M-17: George Auto Supply

- ☐ Material Believed to be Zinc Chromate-Unknown Quantity
- ☐ Abundance of 55 Gallon Metal Drums-Unknown Material
- ☐ Abundance of 5 Gallon Metal Pails-Unknown Material
- ☐ Abundance of 1 Gallon Metal Cans-Unknown Material
- ☐ Abundance of Freon Cylinders (East Side M-101)-Unknown Material
- ☐ Abundance of Aerosol Cans (East Side M-101)-Unknown Material
- ☐ Abundance of Oil Filters (East Side M-101)
- ☐ Oily Runoff to Drains, Pavement, Canal

M-101: MCC Warehouse, Inc.

- ☐ Chemicals – See EPA info.
- ☐ Basement Contamination with Tanks & Drains

M-135: Partial MCC Warehouse – (see M101)

- ☐ Oxy-Acetylene Cutting Equipment-Unusable
- ☐ 3-5 Gallon Plastic Diesel Containers-Empty
- ☐ 1-5 Gallon Plastic Kerosene Container-Empty
- ☐ 2 Vessels (2nd Floor)-Unknown Condition
- ☐ 3 Approx 12 Gallon Metal Holding Tanks (Upper Deck Platform)
- ☐ Some Empty 55 Gal. Drums
- ☐ Cylinders
- ☐ Basement- Unknown Condition/Drains with Tanks & Drums

M-155: Printers Printer, Inc.

- ☐ Printing Equipment
- ☐ Basement

Bridgeport Fire Photo Log
30 May 2001
Photos By BM1 Pat McNeilly

1. Bldg. C101, Georges Auto Supply



Paints, oil filters, aerosol cans, car wax and soap in trailers



Antifreezes



55 Gallon Drums

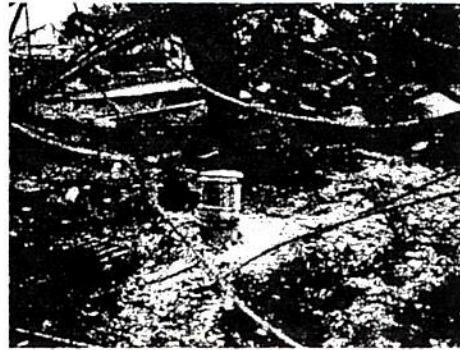


Oil filters and freon containers

2. Bldg. C-127 MCC, Inc.



Corrosive staining

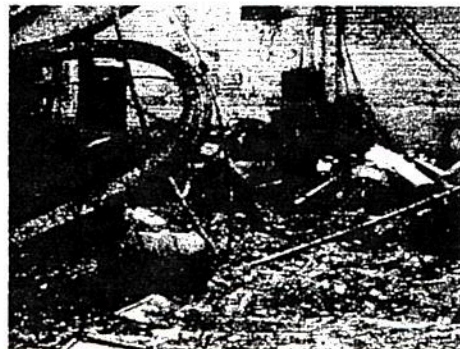


55 Gallon drum and unknown white powder

3. Bldg. C-147 Mainline Lawn Service



Heating oil tank and 55 gallon drums



55 gallon drums and lawn equipment

4. Bldg. C-177 Restoration Station



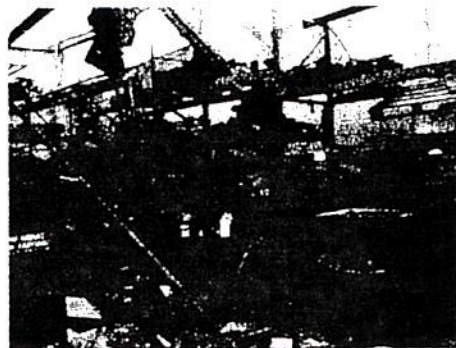
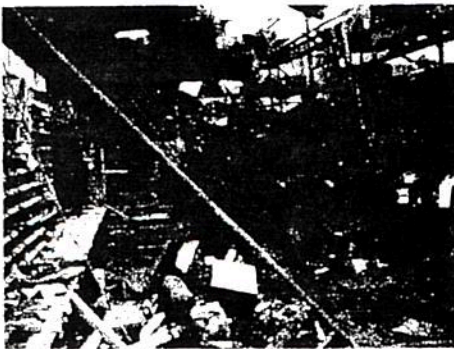
Aerosol paint and 55 gallon drums

5. Bldg. C-185 Valley Forge Candle Co.



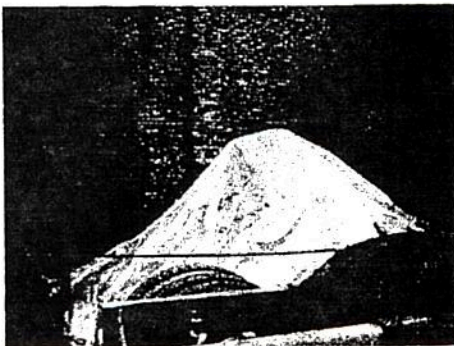
Candle wax, candle molds, 55-gallon drums and 5 gallon containers

6. Bldg. C-193 ARB Breadcrumbs

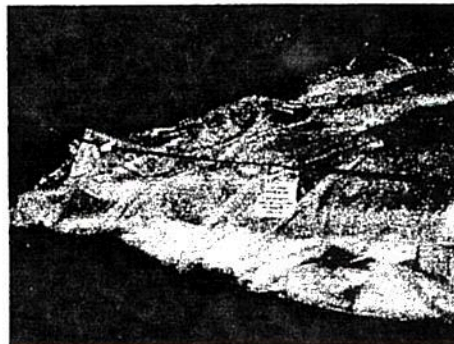


Repair shop containing oils, antifreeze and general shop waste

7. Bldg. J-130 Centex Environment

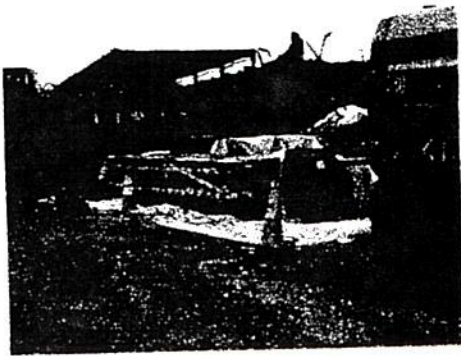


PCB Contaminant pile



Asbestos Pile

8. MCC Loading Dock

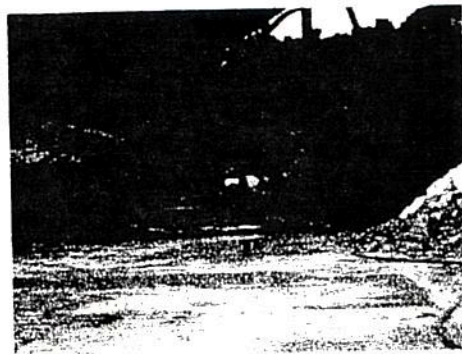


Contractor Waste, paint cans

9. MCC Warehouse



Sulphate



Lead Chromate in background. Residual Titanium Dioxide on floor.

10. Bldg. M-17 Auto warehouse supply



Oil jugs, aerosols, oil filters, and lead chromate (Bldg. M-135)



Aerosols



Antifreeze and aerosols

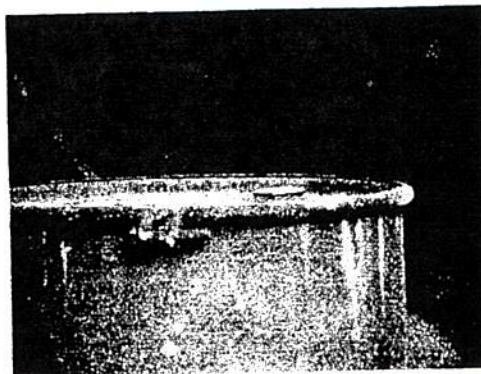


Freon and aerosols

11. MCC Warehouse



55 gallon drums, puddle of copper,
and venting drum



Venting drum

APPENDIX 10

EPA SAFETY MEMO

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, PA 19103
TOWLE - 3HS31

SUBJECT: Site Safety and air monitoring
Continental Business Center

FROM: Michael Towle, OSC 
EPA Region III

TO: File

date: 01 June 01

cc: Bushar Corp.

Since 18 May 01, the EPA On-Scene Coordinator (OSC) has assisted or functioned as Site Safety Officer for fire suppression, fire investigation, and other environmental operations in response to a fire and environmental cleanup at the Continental Business Center. The OSC also conducted monitoring activities to ensure that operations or conditions at the Site did not pose a threat to human health or the environment. The OSC engaged the services of representatives of the U.S. Coast Guard Atlantic Strike Team and Tetra Tech EMI to execute these roles. The OSC fulfilled these functions at the request of and in response to Local, County, and Federal level officials.

The following were accomplished.

(1) Routine air monitoring was conducted to ensure that fire emissions and potential chemical releases did not pose a threat to the community or workers at the Site. If necessary, work zones and PPE levels would be established to ensure protection of workers and community. If necessary, measures to reduce smoke or otherwise reduce toxic emissions were recommended. The air monitoring for this effort is no longer required since fire is not an issue. The OSC also advised appropriate PPE and respiratory protection levels should workers need to work in chemical zones. Tetra Tech EMI implemented air monitoring.

(2) Routine air monitoring was conducted to ensure that potential emissions from environmental work areas (i.e., MCC Warehousing) did not pose a threat to the community and other workers on the Site (e.g., utility workers, business persons, etc.). Air monitoring was a tool used to ensure that workers and community members not part of Site operations were protected. Tetra Tech EMI implemented this air monitoring. Routine levels indicate that Site operations are not anticipated to pose a threat to the community **as conducted**. Additional operations will warrant additional monitoring on an action-specific basis. The OSC understands that the owner is preparing a work plan at this time.

(3) The OSC initiated a Site-wide notification and evacuation plan to ensure that persons in the burned area of the complex would know what to do in the event of an unexpected release. USCG-AST personnel implemented that system through the use of personnel, signals, and radio contact. This system ensured that persons not intimately involved in the environmental operations could be notified in the event of an unexpected release as quickly as those that are involved.

(4) The OSC directed that a Site wide health and safety plan be developed to comply with OSHA 1910.120. These regulations require qualified individuals to develop and implement Safety Plans to ensure the protection of workers at hazardous sites. The environmental contractor developed a plan for their own employees; EPA developed a plan to ensure the safety of others.

Beginning C.O.B. 01 June 01, the OSC expects to no longer provide personnel to ensure the safety of workers and visitors at the Continental Business Center. The OSC has reviewed the environmental contractor (Lewis) Safety Plan and finds it suitable for workers in the active environmental work zones. The OSC finds that current operations, as conducted, are not expected to impact the community.

The OSC has advised the owner's representatives of the need for overall Site Safety, a system to secure the Site and ensure the safety of persons entering the Site areas, and monitoring to ensure that the Site operations do not pose a threat to the community or environment. The OSC believes that this is now the owner's sole responsibility.

The OSC notified the owner of the OSC's actions, provided the owner with excerpts of 1910.120, provided this document to the owner, and made recommendations for future actions this day.

Recommendations:

- (1) Develop Site Safety Plan covering all of the Site. Specific work zones can be addressed under the overall Site Safety Plan.
- (2) Identify a Site Safety Officer to cover the overall Site operations. Contractors working in specific environmental areas will continue to be responsible for the safety of their personnel.
- (3) Development and implement air monitoring to ensure that specific work zones or overall Site conditions (and future expected work) does not impact operating businesses and the community.
- (4) Utilize personnel meeting the training requirements of 29 CFR 1910.120 to implement Site Safety.

APPENDIX 11

POLLUTION REPORTS (POLREPS)

POLREP 01

Bridgeport Industrial Park Fire ER

int. Front and Ford Sts.

Bridgeport, Montgomery County, PA 19405

ATTN: RRC

C. Kleeman

I. Situation (as of 2200 hrs. 16 May 01)

EVENT: CERCLA Emergency Response

- A. A fire was discovered at approximately 1300 hrs. 15 May 01 at the Bridgeport Industrial Park located along several blocks of Front Street in Bridgeport, Montgomery County, PA. The Bridgeport Fire Departments initiated response. The fire quickly spread due to a common roof and elevated wind conditions causing response by a variety of local fire companies. The fire burned out of control for more than 12 hours destroying or significantly affecting nearly 50 business operations within the complex. A variety of chemicals were stored in a few locations within the complex. The fire was declared under control at approximately 0330 hrs. 16 May 01.
- B. The EPA was requested to assist with environmental matters at the scene by Montgomery County officials at approximately 0900 hrs. this day. The On-Scene Coordinator arrived at approximately 1015 and surveyed the incident with County and Local officials. Active fire and flareups were visible in several portions of the multi-building complex, but most of the complex was simply smoldering. The Pennsylvania Department of Environmental Protection (PADEP) was onscene and actively working with a contractor (Lewis) hired by the complex owner to contain fire runoff water from further contaminating the adjacent Schuylkill River. Downstream water users were already notified and PADEP indicated that River monitoring was underway. Air monitoring was not conducted. The OSC was requested to evaluate the chemicals potentially in the facility and make recommendations for ongoing and continuing actions and assist where possible.

II. Actions

- A. The OSC coordinated his actions relating to environmental matters with the Bridgeport Fire officers, Montgomery County Emergency Management and Pennsylvania DEP within a Unified Command setting. PEMA also participated in many of the environmental decisions. The Bridgeport fire officials maintained status as Incident Commander.
- B. The OSC met with officials of Pennsylvania Emergency Management Agency (PEMA), PADEP, and Montgomery County and initiated a review of available MSDS sheets and information supplied by the Industrial park owner. Most available information specific to individual companies was burned in the fire. Some information was made available by the complex owner and his staff. A listing of potential chemicals involved in fire was developed based upon MSDS and other information.

- C. The OSC requested chemical expertise from EPA and the START contractor (Tetra Tech). These persons reviewed the available information and identified which chemicals might potentially persist in a fire and pose a threat once the major fire diminished and a smouldering fire continued (i.e. diminishing heat). This list of chemicals of potential concern was then forwarded by the OSC to the Agency for Toxic Substances and Disease Registry (ATSDR) and discussed. The conversation indicated that some chemical degradation may pose a threat to unprotected persons when the fire diminished. As such the OSC recommended and implemented air monitoring activities and a level of respiratory and dermal protection for persons that will work in the chemical warehouse area.
- D. PADEP continued to recommend and implement improvements to the system installed to contain runoff water or spills. However, since the complex is built over a canal which leads into the River and the entire complex drainage discharges into the River, this exercise proved difficult and the onsite strategy dealt mainly with containing spills on the River with boom. Individual outlets from the complex were boomed. Additionally, containment boom was placed on the canal and River proper. Additionally, one underflow structure was built in a major overland flow location. An oily sheen is located along the west bank of the River and floating oily product exists on the canal.
- E. Based upon the review of potential chemicals in the runoff and discussions with ATSDR, the OSC recommended that PADEP further advise downstream water users to conduct analyses for amine and phenol compounds. PADEP agreed to implement this request.
- F. The OSC contacted the owner of a chemical storage warehouse and requested an onsite meeting 17 May 01 along with the PADEP. The warehouse contains a variety of chemicals (although the owner is still working on a current inventory) that are under the collapsed roof structure. The likely chemicals currently stored contain a large variety of hazardous substances and continue to pose a threat to the environment and public. When this building no longer is engaged in fire (flareups continue), the owner will be requested to conduct immediate stabilization and containment activities.
- G. The OSC requested Community Involvement support. EPA CIC Deitzel coordinated with the onscene PADEP spokesperson on developing information for release to the media. The OSC attended a news briefing at Borough Hall lead by Borough of Bridgeport officials and CIC Deitzel dealt directly with media at the scene.
- H. Unified Command members met at the end of this day to discuss night time operations and plan for activities of 17 May 01. This night, Fire officials will focus on removal of an unstable multi-story wall in an area that is not involved with known chemicals. This wall must be removed to enable safe entry by fire officials to extinguish a large portion of the remaining fire. A demolition contractor has been engaged by the Local Officials. This night, Lewis Environmental will remain onscene to contain runoff water and spills. If the chemical warehouse collapses this night, runoff will be contained. If the warehouse flares up, firefighting will occur from a distance. EPA will conduct air monitoring before morning

operations. On 17 May, Command will meet with the owners of the complex and warehouse and indicate the immediate need for environmental evaluation of the complex to ensure safety of future activities and stabilization of the deteriorated warehouse and chemicals.

III. Future Actions

- A. The OSC has directed that START (Tetra Tech) conduct air monitoring this evening/early morning of 17 May.
- B. Continue activities to minimize discharge of contaminated runoff water.
- C. Coordinate actions for stabilizing the chemical warehouse location.
- D. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas once the fire is extinguished.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 02
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1700 hrs. 17 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
 - A. Hot spots within the burned complex continued to smolder throughout the night of 16/17 May and this day. Drums of chemicals within a storage warehouse ignited during the night requiring fire suppression. Foam was used this day to put out fire in an auto parts facility. Demolition activities focused on demolition of high walls to facilitate access for fire fighters to hot areas of the complex. Contractors hired by the complex owner continue to contain oily runoff that enters a canal which runs beneath the complex and the Schuylkill River. The overall Incident Command is maintained by the Borough of Bridgeport. EPA and PADEP continue to provide support to fire operations and direct environmental operations through Unified Command. Activities this day focused on completion of air sampling, developing a plan for stabilization of the chemical storage warehouse, and developing an overall strategy for characterizing potential environmental concerns in the remainder of the complex. The OSC and PADEP believe that the main area of concern to the public is the chemical storage warehouse and that the remainder of the complex primarily poses a threat of runoff into the waterways. Strategies for environmental protection are coordinated through the Bridgeport Incident Commander.
 - B. A significant message from the Site to the community remains that the fire caused a significant damage to the economic vitality of the Bridgeport area (loss of business and loss of jobs). The fire damaged or destroyed nearly half of the businesses in the community. PEMA is organizing applications for loans and the State is also facilitating unemployment applications for those that lost their jobs. Additionally, EPA air data demonstrates that air quality at this time does not pose a threat to the community. PADEP activities ensure that the waterway impacts are minimized. The owner of the complex has provided and met all requests from EPA and PADEP at this time enabling the Site message to reduce the emphasis on environmental and public health impacts.
- II. Actions
 - A. The OSC continues to coordinate his actions and direct actions relating to environmental matters with the Bridgeport Fire officers, Montgomery County Emergency Management and Pennsylvania DEP within a Unified Command setting. The Bridgeport fire officials maintained status as Incident Commander and maintained control of the fire scene. Local and State

police maintained overall Site security.

- B. The OSC directed air sampling during the overnight period of 16/17 May. The START contractor (Tetra Tech) monitored for amines, HCN, and HCL during this time in downwind areas. These parameters were selected after review of possible chemicals in the warehouse area, their persistent or toxic behavior in the fire, and their potential human health affects. The parameters were selected by the OSC after review by chemists from EPA and Tetra Tech and the Agency for Toxic Substances and Disease Registry (ATSDR). Additionally, these parameters would indicate emission from a chemical source rather than combustion of more routine materials and structural elements in the overall building complex. The air monitoring event confirmed that air quality in public areas does not indicate chemicals resulting from the chemical storage area of the industrial park.
- C. The OSC communicated the overnight air monitoring results to EPA and PADEP for coordinated release to the public. The OSC also communicated the results to the Incident Command and Safety Officer (Bridgeport).
- D. Based upon the potential for increased chemical concentrations in the air at the warehouse facility, EPA advised to adjust the Site perimeter in this area and to conduct air monitoring within the Site. PADEP and Bridgeport officials concurred and this activity was implemented Bridgeport police (Site perimeter) and by START contractors throughout this day. Results of colormetric tubes, HCN monitox, and PID, do not indicate elevated concentrations of chemicals in the air at this time. These results were communicated to the Bridgeport officials.
- E. ATF and Local fire investigators initiated investigative activities in the complex this day. These activities will occur prior to an overall environmental assessment of the remainder of the complex (i.e., in addition to the more urgent assessment initiated at the chemical storage warehouse). Once completed, overall environmental assessment activities will be initiated.
- F. The OSC and PADEP communicated with the owner of the chemical storage warehouse in an effort to better understand the building contents and to inform the owner of the need to conduct immediate stabilization efforts. Drums, containers, bags and other forms of chemical containers are visible in the burned and collapsed structure in addition to an area of pooled "water". Chemicals identified to date in elevated quantities include caprolactam and lead chromate. The business owner contacted his clients and requested inventory information since the owners records were burned. The clients contacted the OSC and provided information and agreed to send information to the Site. The complex owner (Bushar Organization) agreed to provide an environmental, insurance, and legal contact for the OSC and PADEP to inform of the need for cleanup. A meeting conducted this afternoon among these participants resulted in the identification of the need for cleanup, an overall strategy for the cleanup, and the request to provide definitive answer to the capability to conduct the cleanup by tomorrow morning.
- G. The OSC surveyed the oil containment area this day. Several areas of boom are stretched on the Schuylkill River and effectively deflect the oily material to a shoreline collection point.

The oily material enters the River through designed drainage systems underlying the entire complex as well as through overland flow. Where possible, underflow structures have been constructed between the Site and the River, however, there is insufficient land to effectively use this method of mitigation in all areas of the Site. Drainage outlets have protective boom at the outfall area.

- H. Oily material also enters a canal that passes beneath the complex. The oily material is contained at the location where the canal discharges to the River. Oily material is picked up with absorbent material and two vacuum trucks by Lewis Environmental inc. Oily material is not visible beyond the downstream booms.
- I. The OSC communicated Site information to the Regional Office.
- J. The OSC initiated coordination with federal natural resource trustees. No impact to aquatic community has been identified to date.
- III. Future Actions
 - A. Coordinate actions for stabilizing the chemical warehouse location. Evaluate the need to conduct these actions using CERCLA authorities.
 - B. Evaluate the need for enforcement instruments to ensure continuing environmental protection, stabilization, and cleanup actions.
 - C. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy.
 - D. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas once the fire is extinguished.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 03

Bridgeport Industrial Park Fire ER

int. Front and Ford Sts.

Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1700 hrs. 18 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses. Individual names of the businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology is used.
- B. Hot spots within the burned complex continued to smolder throughout this day. Small containers of auto-related chemicals burned this day as fire suppression activities focused on a hot spot area of numerous aerosol containers and other pressurized vessels. Foam was again used this day to put out fire in the auto parts facility. Demolition activities focused on assistance to fire investigation officials. Contractors (Lewis Environmental) hired by the complex owner continue to effectively contain oily runoff that enters a canal which runs beneath the complex and the Schuylkill River. The overall Incident Command is maintained by the Borough of Bridgeport; EPA, PADEP, and Montgomery County Emergency Services form Unified Command for the environmental and safety aspects of the Site. EPA was requested to function as Site Safety beginning this day. Site activities this day continue with fire suppression, fire cause investigation, oil containment, air monitoring, water sampling, and activities related to overall characterization of potential contamination within the complex. The OSC and PADEP also facilitated an expedited stabilization by the owner of the chemical storage warehouse.
- B. EPA air monitoring results continue to indicate that elevated concentrations of chemical and degradation products believed to be related to the chemicals remaining in the warehouse area are not identified in downwind areas. Additionally, monitoring results for volatile compounds continues to show negligible levels within the operational areas. The OSC communicated with the Montgomery County Health Department to relay the results and enable the Department to factor the information into the current Health Advisory.
- C. OSC Bob Kelly performed Operational duties this day and assisted OSC Towle
- D. The START contractor (Tetra Tech) performs air monitoring activities. The USCG Atlantic Strike Team is assisting the OSC to implement Site Safety and Control.
- II. Actions

- A. A Unified Command meeting was conducted this day to coordinate activities between fire investigation and fire suppression actions. Additionally, this meeting formed the ground work for coordination between stabilization activities expected at the chemical storage warehouse and the remainder of the Site expected to be initiated soon. EPA was requested to organize and implement Site Safety. The OSC requested the assistance of the USCG Atlantic Strike Team in this matter.
- B. The OSC directed air sampling activities at the scene throughout this day. The results of the sampling and monitoring are used to ensure the safety of the investigators and others working the incident as well as nearby residents. Results within the Site perimeter continue to show negligible levels. A slightly elevated VOC reading was identified immediately prior to the ignition and burning of a pile of scorched aerosol and other pressurized containers.
- C. The OSC directed air monitoring near a business in the downwind area this day at which employees reported feeling sick. EPA air sampling results do not indicate the presence of chemicals in the smoke plume that was identified near the business location.
- D. The OSC, PADEP, USCG, and Local Fire Officials surveyed the oil collection booms on the Schuylkill River. Recommendations to modify one area of boom were made to enhance the collection of oily runoff; this change was made. The flow of oil onto the River has dissipated (fire fighting efforts are decreasing). Overall booming strategy and oil collection remains effective. Contractors use a vacuum truck to remove the oil and transfer the oily material to containment tanks.
- E. EPA collected a sample of the oily discharge this day. The sample will be analyzed for a wide variety of parameters on a quick turnaround basis. The results will help guide future cleanup operations, enable gross characterization of ponded water areas at the Site, and the level of concern necessary for containment of future runoff water at the Site
- F. Fire investigation officials continue to investigate the potential causes of the fire. Access to the investigation area is limited.
- G. The OSC and PADEP met with the owners of the chemical storage warehouse and requested immediate action to stabilize the situation (compromised chemical containers in a compromised warehouse). The owner has agreed to hire demolition and environmental contractors to conduct this work and expect them onscene tomorrow. The OSC requested that these contractors meet with the OSC and PADEP to receive available chemical information received from companies utilizing the warehouse, achieve agreement on a strategy, and to coordinate all activities with the Unified Command.
- H. Local Government Reimbursement information was forwarded to Montgomery County officials.
- I. The OSC received a Facility plan and information from the owner this day indicating building layouts, potential areas of concern, and potential areas of subgrade features. This information

will be used to guide future assessment activities and enable safer demolition activities.

III. Future Actions

- A. Coordinate actions for stabilizing the chemical warehouse location.
- B. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy.
- C. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas once the fire is extinguished.
- D. Complete and implement Site Safety Plan coordinating activities of fire investigation, fire suppression, warehouse stabilization, demolition, and oily material collection.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 04
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1200 hrs. 19 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses. Individual names of the businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology is used.
- B. Hot spots within the burned complex continued to smolder throughout this period. Demolition activities focused on assistance to fire investigation officials. Contractors (Lewis Environmental) hired by the complex owner continue to effectively contain oily runoff that enters a canal which runs beneath the complex and the Schuylkill River. The overall Incident Command is maintained by the Borough of Bridgeport; EPA, PADEP, and Montgomery County Emergency Services form Unified Command for the environmental and safety aspects of the Site. EPA continued functioning as Site Safety during this period. Site activities this period continue with fire suppression, fire cause investigation, oil containment, air monitoring, and activities related to overall characterization of potential contamination within the complex.
- B. EPA air monitoring results continue to indicate that elevated concentrations of chemical and degradation products believed to be related to the chemicals remaining in the warehouse area are not identified in downwind areas. Additionally, monitoring results for volatile compounds continues to show negligible levels within the operational areas.
- C. OSC's Bob Kelly and Chris Wagner performed Operational duties this period and assisted OSC Towle.
- D. The START contractor (Tetra Tech) performs air monitoring activities. The USCG Atlantic Strike Team is assisting the OSC to implement Site Safety and Control.
- II. Actions
- A. A Unified Command meeting was conducted this period to coordinate implementation of site safety. Basic groundwork of site safety plan, including communications, air monitoring, evacuation procedures, and personnel accountability were discussed. USCG to conduct periodic safety inspections.

- B. The OSC directed air sampling monitoring at the scene throughout this period. The results of the monitoring are used to ensure the safety of the investigators and others working the incident as well as nearby residents. Results within the Site perimeter continue to show negligible level. Dust monitoring program was implemented.
- C. The OSC directed radiation survey within the site perimeter. No levels above background were measured. Site information indicates that potential sources were not involved in the fire.
- D. Fire investigation officials continue to investigate the potential causes of the fire. Access to the investigation area is limited.
- E. The owner hired contractor (Lewis Environmental) to handle environmental work. Environmental contractor mobilized to site this morning to began preparations for stabilization efforts at the chemical storage warehouse. Environmental contract met with OSC to receive available chemical information received from companies utilizing the warehouse, achieve agreement on a strategy, and to coordinate all activities with the Unified Command. Shultz Demolition and Domino Salvage were hired to conduct demolition work. Demolition contractors will team with environmental contractor to begin stabilization efforts.
- F. EPA directed that asbestos containing material piping be wrapped, dropped, and pulled away prior to abatement to facilitate access during emergency operations. Environmental contractor to document handling of asbestos and report that information to DEP. DEP representative has concurred with this strategy.

III. Future Actions

- A. Coordinate stabilization actions at the chemical warehouse location.
- B. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy.
- C. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas once the fire is extinguished.
- D. Complete and implement Site Safety Plan coordinating activities of fire investigation, fire suppression, warehouse stabilization, demolition, and oily material collection.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 05
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 0800 hrs. 20 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. Hot, smouldering or open fire locations remain within the complex. In addition to minor areas of smouldering remains, the basement beams of the collapsed J building and the basement area beneath the chemical storage warehouse continue to burn and release smoke. Demolition activities this period continued to assist fire investigation officials and support chemical removal activities in the chemical storage warehouse. Contractors (Lewis Environmental) hired by the complex owner continue to effectively contain oily runoff that enters a canal which runs beneath the complex and the Schuylkill River. The overall Incident Command is maintained by the Borough of Bridgeport; EPA, PADEP, and Montgomery County Emergency Services form Unified Command for the environmental and safety aspects of the Site. Site activities this day continue with fire suppression, fire cause investigation, oil containment, air monitoring, and activities related to overall characterization of potential contamination within the complex.
- B. EPA air monitoring results continue to indicate that elevated concentrations of chemical and degradation products believed to be related to the chemicals remaining in the warehouse area are not identified in downwind areas. Additionally, monitoring results for volatile compounds continues to show negligible levels within the operational areas.
- C. Examination of the chemical storage warehouse location indicates that many of the chemicals have released from their containers (e.g., bags and plastic containers that burned or melted in the fire). As such, many of these materials have likely released from the building in the fire runoff. The OSC has been unable to specifically determine how runoff within the building may drain, but it likely moves to the canal through drainage designed to convey water through the basement (based upon conversation with owner). Overland runoff enters grates which enter the canal. Nearby grates are protected with boom and absorbent material. The OSC expects results of a runoff sample collected earlier on 21 May 01.

- D. OSC Bob Kelly and Chris Wagner performed Operational duties this period and assisted OSC Towle
- E. The START contractor (Tetra Tech) performs air monitoring activities. The USCG Atlantic Strike Team is assisting the OSC to implement Site Safety and Control.

II. Actions

- A. Unified Command issues this period included the completion of fire investigation activities followed by the demobilization of these investigative assets. As such, police officials turned over control of the scene to the Bridgeport Fire Chief.
- B. Unified Command meetings are scheduled for 1000 hrs. each day. It is expected that the Bridgeport Fire Chief will transfer control of the scene to Montgomery County Emergency Services on 21 May 2001.
- C. Bridgeport Fire continued fogging operations in the auto parts storage area containing aerosol cans, oil materials, and pressurized cylinders until approximately 1800 hrs. 19 May 2001. After fire investigation was completed in Building C, the fire department also extinguished an oily fire in Building C after the burning material was spread using heavy equipment.
- D. Contractors (Lewis Environmental) hired by the owner initiated removal of chemicals from the chemical storage warehouse. The owner, the OSC and PADEP met to discuss the strategy for removal of the chemicals from the burned warehouse. The OSC directed that the operation be a stabilization effort to ensure that further collapse of the building, precipitation events, and similar issues would not initiate a release to the environment or a threat to the nearby public. Chemicals should be moved to a staging area while minimizing spills. Ultimate cleanup may be left to future time periods. The OSC informed the contractor that the owner of the business could be contacted for assistance and that one of the clients had requested to the present when their materials were moved.
- E. Lewis contacted the client (Durr) which was very concerned about potential releases resulted from the movement of their materials. The OSC became involved in the conversation and informed the client that the materials had to be moved on an emergency basis due to the condition of the facility. The client sent their insurance agent to the scene to meet with the OSC. The OSC allowed the agent to survey the location of the materials.
- F. Barium metaborate monohydrate was removed from the chemical storage area and transferred to a Staging area constructed on the west side of the warehouse.
- G. 15 5-gallon phosphoric acid containers were moved from the location of building C (127) to the Staging Area. These containers were not within the chemical storage warehouse and will be kept separate according to the contractor.
- H. After many hours of water spray onto a hot area of pressurized vessels and oil that burned and

flared frequently, the runoff water started to discolor green and the pH began to rise. The environmental contractor (Lewis) began to contain the water and pump into a storage tank. PADEP informed that neutralization of the water could enable discharge from the Site.

- I. Fire cause investigation activities were completed this period and demobilization from the Site was conducted at approximately 1600 hrs. 19 May.
 - J. After completion of fire cause investigation, the police presence on the Site was decreased and Site security was turned over to the owner.
 - K. Preparation of the decontamination and staging area in support of chemical operations included demolition of adjacent high walls of J building. The demolition contractor (Schultz) is working for Lewis Environmental in this effort.
 - L. Oil containment and recovery operations continue throughout this period.
 - M. The OSC directed air sampling activities at the scene throughout this day. The results of the sampling and monitoring are used to ensure the safety of the investigators and others working the incident as well as nearby residents. Results within the Site perimeter continue to show negligible levels.
- III. Future Actions
- A. Continue to coordinate actions related to stabilization of the chemical warehouse location (a portion of the M Building). Actions include ensuring containment of potential additional releases.
 - B. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
 - C. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas once the fire is extinguished.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 06
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1800 hrs. 20 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. Fire suppression activities this day focused on remaining small areas of smouldering or otherwise smoke emitting hot spots. Ground crews went through building C and addressed remaining fire areas. A fire in the large timbers within the basement of building J was also extinguished. The only area of visible fire remains within the basement of building M under the location of the chemical storage warehouse. Site activities this day continue with oil containment and recovery, air monitoring, fire suppression, chemical warehouse stabilization, and related support activities. Demolition operations occurred on the M building along Front Street to remove unstable walls.
- B. EPA air monitoring results continue to indicate that elevated concentrations of chemical and degradation products believed to be related to the chemicals remaining in the warehouse area are not identified in downwind areas. Additionally, monitoring results for volatile compounds continues to show negligible levels within the operational areas. Monitoring this day included monitoring specific to vinyl chloride due to concerns about PVC piping in the basement of M building. No vinyl chloride was detected.
- C. The START contractor (Tetra Tech) performs air monitoring activities. The USCG Atlantic Strike Team is assisting the OSC to implement Site Safety and Control.
- II. Actions
- A. Command and safety meetings were conducted this period between EPA (USCG), Bridgeport Fire, Lewis Environmental. This days activities include removal of chemicals from the storage warehouse, demolition of unstable walls in the area, extinguishment of fire in buildings C and J, collection and containment of oil. Operations in the warehouse are level C at this time.

- B. Bridgeport Fire extinguished fire in building C using ground crews and aerial spray. No visible smoke is observed at the end of this day from C building.
- C. Bridgeport Fire extinguished fire in the collapsed basement of Building J using aerial spray. No visible smoke is observed at the end of the day from J building.
- D. Based upon knowledge of the owner, the basement under the chemical storage warehouse is full of old machinery and PVC pipe and is contiguous with many adjacent structures including unburned buildings. Due to concern about the spread of fire, an entry was made into the basement by Bridgeport Fire and USCG personnel. Entry was made in an area that did not exhibit fire. The entry team was able to determine that the likelihood of the spread of fire to unburned structures through the basement was low and the fire in the basement was located in the wood beams/supports of the overlying floor.
- E. The demolition contractor was directed to remove a portion of the floor of the M building to enable fire suppression to address the fire closest to the Lewis Environmental work zone. Water was applied to the wood beams.
- F. Water ponded in the basement of building J was collected and subjected to Hazardous Categorization testing by the START contractor. The ponded water did not exhibit characteristics suggestive of increased contamination. The water is slowly draining from the basement. The owner indicates that the water drains from a pipe in the basement to the Schuylkill River. Based upon the rate of drainage, the pipe is likely to be partially blocked. The OSC will monitor this situation and request sampling should conditions so indicate.
- G. The OSC and START contractor continued efforts to determine how the complex drains into the River and canal. These efforts are used to best contain water that is potential contaminated by ongoing operations. Active inlets are protected by boom. At this time, containment of storm runoff that may run through the exposed chemicals will be exceedingly difficult to accomplish based upon review of facility plans, Site inspection, and conversation with the owner.
- H. Oil containment booms continued to be rehabilitated this period. Padding is changed and removed in anticipation of upcoming rain events.
- I. The OSC and USCG initiated characterization efforts of overall Site conditions.
- J. Contractors (Lewis Environmental) hired by the owner continued removal of chemicals from the chemical storage warehouse. The chemicals are segregated as best as possible and moved to a secure location. Today's activities occur in a portion of the building which is not currently involved in fire.
- K. Demolition contractors removed 4 story walls along Front Street. After the debris is cleared, the gas company can shut off the gas feeding the open flames in this area. Until this time, this activity could not occur due to potential collapse of the severely compromised M structures.

- L. The OSC directed the removal of an asbestos covered pipe along a bridge spanning the roadway to the chemical staging area. Due to the urgency of the situation, the OSC directed that the pipe be wrapped, cut, dropped, and moved prior to abatement. The action should occur under a water fog. The OSC consulted with DEP and received concurrence with this emergency procedure. Lewis is instructed to formally notify PADEP 21 May 2001.

III. Future Actions

- A. Continue to coordinate actions related to stabilization of the chemical warehouse location.
- B. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
- C. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas once the fire is extinguished.
- D. The Borough has requested the OSC to brief the community at a meeting on 22 May 2001.
- E. Assist the owner to keep personnel expected to return to their business locations safe from the chemical warehouse stabilization operations. The OSC has instructed USCG to brief each of these entities about emergency evacuation procedures.
- F. Review analytical results and collect additional data as necessary to ensure that runoff does not pose a threat to the environment during upcoming operational periods

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 07

Bridgeport Industrial Park Fire ER

int. Front and Ford Sts.

Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1800 hrs. 21 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. EPA (and PADEP), Montgomery County Emergency Services, and owner's contractor representative (Lewis Environmental) maintained Unified Command for environmental issues during this days operations. EPA coordinated all issues with PADEP representatives onsite. This days environmental operations included continued oil recovery on the River and canal, continued stabilization of the chemical storage warehouse, and continued Site Safety. The OSC also directed that EPA assets (Atlantic Strike Team) assist the owner with safety of business owners and insurance personnel on Site this day. The operational period is 0700 through 1900; oil recovery operations continue 24 hours each day. The OSC coordinates environmental issues with owners environmental consultant (Alpha Environmental).
- C. EPA air monitoring was not conducted this day due to rain. Other than smoke from remaining fire in the basement of the M building in the chemical warehouse area, no emissions were observed.
- D. Site stabilization activities and containment of runoff waters continue to be conducted by Lewis Environmental under contract to the owner of the entire complex.
- II. Actions
- A. Command and safety meetings were conducted this period with EPA, Bridgeport Fire, Montgomery County Emergency Services, owner, and Lewis Environmental. Safety concerns this period included increased presence of business owners and insurance personnel. USCG and EPA conducted safety briefings, escorted personnel, or otherwise ensured safety of persons from chemical hazards on site. The owner was informed that he had responsibility for persons that may want to enter buildings; the OSC advised that these persons not enter the structures.

- B. EPA, USCG, and START examined the Site during this days precipitation and identified Site drainage pathways. Information was forwarded to Lewis Environmental for consideration during booming and similar protection strategies. Inlets on the Site have protective boom.
- C. The OSC and START contractor completed consideration of possible strategies for containment of Site runoff in addition to removal of floating oily material. Most options involved containment or pumping of water within or from the canal. These efforts were deemed impractical during precipitation events since the canal passes water from streets in the Borough of Bridgeport causing potentially significant flows. The OSC determined that the analytical results of runoff liquids collected 18 May should be evaluated prior to constructing additional Site-wide containment of potentially contaminated runoff. These analytical results are expected this day.
- D. Initial analytical results from PADEP sampling of River water and verbal results of EPA sampling of runoff water were received. The results indicate that certain contaminants are increased in the Site runoff. Results do not initially suggest that extraordinary measures be taken to capture all Site drainage. The OSC consulted with PADEP and determined that oily material leaving the Site should continue to be contained, but that additional runoff protection may rely solely upon protection of source areas from precipitation (e.g., tarps, covers, booms, dams). The chemical warehouse area drains directly into the canal and the pipes within the structure are not accessible at this time. Additional analytical information is needed for areas where water can be collected. This decision will be revisited tomorrow when analytical results are received and reviewed.
- E. The basement of the J building continues to hold water; although water slowly passes to the River through designed drainage now inaccessible. EPA hazardous categorization testing does not indicate that the water is particularly harmful. Lewis Environmental was directed this day to collect a water sample from the basement and analyze the sample. The results will be used to determine if this water can continue to pass to the River or should be otherwise addressed. EPA and PADEP concur on this approach.
- F. The Site owner (environmental consultant) was requested to notify PADEP that asbestos covered piping along a bridge was wrapped, but that the pipe was dropped without abatement. The OSC and PADEP agreed to this approach based upon the urgency of the situation.
- G. Lewis Environmental continues to remove chemicals from the chemical storage warehouse and stage these materials on the northwest side of the former building. Additional structure was also demolished to better access the chemicals.
- H. Several automobiles that were destroyed by the fire were removed from the Site this day.
- I. The OSC and USCG entered one of the buildings in the M complex this day to inspect possible suspect materials adjacent to the chemical storage warehouse. No materials were identified although several cylinders (no longer pressurized) were visible along with several

empty drums.

- J. EPA, START, and USCG continue characterization of the overall Site in an effort to locate and evaluate possible areas of hazardous or oily materials within the debris and Site.
- K. The gas company was on Site this day to shut gas to the small fire along Front Street. This was made possible by demolition of unstable high walls along Front Street and removal of debris in the area.

III. Future Actions

- A. Continue to coordinate actions related to stabilization of the chemical warehouse location.
- B. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
- C. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas.
- D. The OSC was requested to participate in a public meeting at Bridgeport Borough Hall.
- E. Assist the owner to keep personnel expected to return to their business locations safe from the chemical warehouse stabilization operations. The OSC has instructed USCG to brief each of these entities about emergency evacuation procedures.
- F. Review analytical results and collect additional data as necessary to ensure that runoff does not pose a threat to the environment during upcoming operational periods.
- G. Evaluate the possibility of entering the basement from the southeast corner (excavation and demolition would be necessary) in order to best contain liquids from migrating from the chemical storage warehouse into the canal.
- H. Assist with safety for electrical personnel expected on Site to reroute power.
- I. Ensure PADEP notification of asbestos operation.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 08
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1800 hrs. 22 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. EPA (and PADEP), Montgomery County Emergency Services, and owner's contractor representative (Lewis Environmental) maintained Unified Command for environmental issues during this days operations. EPA coordinated all environmental issues with PADEP representative onsite. This days environmental operations included rehabilitation of booms that were compromised by last nights rain event, continued oil recovery on the River and canal, continued stabilization of the chemical storage warehouse, and continued Site Safety. The OSC continued to direct that EPA assets (Atlantic Strike Team) assist the owner with safety of business owners and insurance personnel on Site this day. The operational period is 0700 through 1900; oil recovery operations continue 24 hours each day.
- C. EPA air monitoring was conducted only during a portion of this day due to rain. Other than smoke from remaining fire in the basement of the M building in the chemical warehouse area, no emissions were observed. The smoke from the basement area of the chemical storage warehouse causes a noticeable odor that continues into downwind areas. EPA monitoring does not indicate elevated concentrations of monitored compounds other than sulfur dioxide. Sulfur dioxide was detected at concentrations of approximately 5 ppm directly in the source area. This level is at the 15 minute STEL concentration of NIOSH and the OSHA Permissible Exposure Limit. Downwind areas do not have this concentration.
- D. Site stabilization activities and containment of runoff waters continue to be conducted by Lewis Environmental under contract to the owner of the entire complex.
- II. Actions
- A. Command and safety meetings were conducted this period with EPA, Bridgeport Fire, Montgomery County Emergency Services, and Lewis Environmental. Safety concerns this period included increased presence of utility personnel, business owners and insurance

personnel. USCG and EPA conducted safety briefings, escorted personnel, or otherwise ensured safety of persons from chemical hazards on site.

- B. EPA, USCG, and START examined the Site during early morning precipitation and identified potential improvements to containment in the operational area of the chemical storage warehouse. Lewis Environmental was advised of potential runoff concerns. A bermed area was constructed to control drainage from entering the canal near an inlet in the vicinity of P building. A vacuum truck periodically removed pooled liquids. Operational changes in the warehouse were instituted (minimizing flow into drains and holes in the floors, covering of chemicals, and separation of work zones) that minimized chemical migration outside of the building footprint.
- C. Runoff from the area of the auto supply location in M building (M-19) continues to contribute oily material to the River via overland flow to street inlets on the Middle Road near C building (C-111). Boom and absorbent padding is placed at these inlets. Periodically, accumulated liquids are removed using a vacuum truck. A vacuum truck was also deployed to the area of burned out building M-19 (auto supply) and oily and green liquids were removed. A manhole is suspected in this area of M-19 with direct access to the canal.
- D. An oiled gosling was found in the boom and transported to Tri-State Bird for rehabilitation. The OSC notified federal trustees and discussed the situation with US DOI and USFWS. As a result of these discussions, the OSC directed shoreline assessment activities to evaluate the existence of oiled areas near identified or possible nests.
- E. A shoreline assessment was conducted by START and owner environmental representative (Alpha Environmental). Goose nesting areas were identified and an area of oily debris on the shoreline was also identified. Lewis Environmental was requested to remove oily debris.
- F. The OSC discussed the possibility of chemical contamination on the oiled bird with Tri-State representative. Based upon review of available chemical information and the concentration of chemical found in the runoff water, the OSC advised that the gosling be handled as if it were oiled only, e.g., other chemicals would not pose additional hazard to Tri-State personnel.
- G. The lead chromate was removed from the chemical storage warehouse this day. No visible signs of the yellow colored material was visible beyond the footprint of the warehouse. Removed chemicals are segregated into storage containers within the Staging area.
- H. The OSC received full analytical data from the runoff water collected on 18 May. Data indicate elevated concentration of petroleum hydrocarbon material and low levels of a variety of organic chemicals and elements. A review of the sample indicates that many of the chemicals would indeed preferentially exist in the oily layer as previously indicated by verbal results. Collection of the oily layer will result in collection of much of the discharged chemicals. Organic chemical concentrations in the water phase of the sample are not elevated to levels of concern for human health or environment (especially once entering the River).

Some inorganic elements are elevated above levels that may pose a threat to aquatic organisms (aluminum, zinc, cadmium).

- I. PADEP provided analytical results of samples collected by the Philadelphia Water Department. Results do not obviously indicate elevated concentrations of contaminants in down River areas linked to the discharge from the Site.
- J. Demolition contractors assisted EPA in investigating possible entrance ways into the basement area of the chemical storage warehouse. Although one access corridor was cleared (hallway in northeast corner), the path was through small hallways with heavy oily liquid. Another effort was made along the south face of the warehouse, but this area had no basement. Considering the constituents of the smoke and the safety concerns of entry through accessways currently identified, the OSC directed that no entry be made to attempt to access, identify, and plug drains from the basement area. Considering the entry difficulties, Bridgeport fire and Montgomery County Emergency Services agreed that entry to address lingering fire issues was also not appropriate at this time.
- K. After continued review of available analytical data, the mechanism of release of runoff from the contaminated areas, and considering access difficulties to further prevent discharges from the basement areas, The OSC continued to determine that no additional activities were practical to stop potential releases from the warehouse area. Activities to further secure stored chemicals and contain runoff from the Staging area have resulted in reduced potential for offsite migration of chemical.
- L. The basement of the J building continues to hold water; although water slowly passes to the River through designed drainage now inaccessible. Lewis Environmental collected a water sample from the basement for analysis. The results will be used to determine if this water can continue to pass to the River or should be otherwise addressed. EPA and PADEP concur on this approach.
- M. The Site owner (environmental consultant) notified PADEP that asbestos covered piping along a bridge was wrapped, but that the pipe was dropped without abatement. The OSC and PADEP agreed to this approach based upon the urgency of the situation.
- N. EPA, START, and USCG continue characterization of the overall Site in an effort to locate and evaluate possible areas of hazardous or oily materials within the debris and Site.
- O. The electric company was on Site this day to address damaged electrical poles along the north side of the Site. Upper Merion Township officials were also onsite to ensure that intrusive activity related to the electric would not compromise their force main which runs through the Site.
- P. The OSC attended a Borough council meeting last night to brief the community about environmental, safety, and health issues.

III. Future Actions

- A. Evaluate possible entry/accessways into the basement area of the chemical storage warehouse to attempt to access, identify, and plug drains and address lingering fire issues.
- B. Continue to coordinate actions related to stabilization of the chemical warehouse location.
- C. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
- D. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas.
- E. Assist the owner to keep personnel expected to return to their business locations safe from the chemical warehouse stabilization operations. The OSC has instructed USCG to brief each of these entities about emergency evacuation procedures.
- F. Review analytical results and collect additional data as necessary to ensure that runoff does not pose a threat to the environment during upcoming operational periods.
- G. Meet with owner to transfer environmental information, determine strategy for addressing demolition without causing environmental harm and keeping community safe from potential releases of hazardous substances.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 09

Bridgeport Industrial Park Fire ER

int. Front and Ford Sts.

Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1900 hrs. 23 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. EPA (and PADEP), Montgomery County Emergency Services, and owner's contractor representative (Lewis Environmental) maintained Unified Command for environmental issues during this days operations. EPA coordinated all environmental issues with PADEP representative onsite. This days environmental operations included rehabilitation of booms that were compromised by last nights rain event (one boom was lost due to increased current), continued oil recovery on the River and canal (although amounts are significantly decreasing), continued stabilization of the chemical storage warehouse (about 30% complete), and continued Site Safety. The OSC continued to direct that EPA assets (Atlantic Strike Team) assist the owner with safety of business owners and insurance personnel on Site this day. The operational period is 0700 through 1900; oil recovery operations continue 24 hours each day.
- C. EPA air monitoring was again conducted only during a portion of this day due to rain. Smoke continues to originate from the basement of the chemical storage warehouse; it appears that smoke originates from wooden beams and sheets that make up the support for the concrete floor of the warehouse. The smoke from the basement area of the chemical storage warehouse causes a noticeable odor that continues into downwind areas. EPA monitoring does not indicate elevated concentrations of monitored compounds other than sulfur dioxide. Sulfur dioxide was again detected at concentrations of approximately 5 ppm directly in the source area. This level is at the 15 minute STEL concentration of NIOSH and the OSHA Permissible Exposure Limit. Downwind areas do not have this concentration.
- D. Site stabilization activities and containment of runoff waters continue to be conducted by Lewis Environmental under contract to the owner of the entire complex.
- E. OSC and PADEP completed development of an overall strategy to address future environmental needs of the Site during the likely upcoming demolition of the burned and

collapsed structures. PADEP onscene representative discussed the strategy with appropriate Departmental personnel. OSC and PADEP determine that debris at the Site has to be assessed and the areas segregated by potential waste stream (e.g., hazardous, construction/demolition, residual waste, asbestos-containing, PCB contaminated. Demolition operations must be conducted in a manner which maximizes environmental protection and environmental contractors need to ensure that releases are contained. OSC and PADEP met with the owner and requested the owner prepare a workplan to document how this future activity will be conducted. The owner agreed to prepare a workplan guiding future activities, the OSC and PADEP agreed to review the work plan, PADEP will approve and oversee its implementation.

II. Actions

- A. Command and safety meetings were conducted this period with EPA, Bridgeport Fire, Montgomery County Emergency Services, and Lewis Environmental. Safety concerns this period included increased presence of utility personnel, business owners and insurance personnel. USCG and EPA conducted safety briefings, escorted personnel, or otherwise ensured safety of persons from chemical hazards on site.
- B. The bermed area of the warehouse operations area was effectively minimizing runoff from entering the grates that enter the canal. A vacuum truck periodically removed pooled liquids.
- C. US Fish and Wildlife Service onsite this day. USFWS and OSC conducted an inspection of the River bank area. Observations of operational areas and shoreline conditions does not indicate that additional activity is necessary to protect wildlife.
- D. Vacuum truck removed pooled oily liquid from the Middle road area.
- E. Demolition contractors further assisted EPA in investigating possible entrance ways into the basement area of the chemical storage warehouse. An access hole was made in the floor of the warehouse along the northern wall. The hole opened into a small area likely used to convey piping (not full basement). The air space was saturated with carbon monoxide and no effort to enter at this location was made. Considering the entry difficulties, Bridgeport fire and Montgomery County Emergency Services continue to agree that entry to address lingering fire issues was also not appropriate at this time. Additional effort will be made as areas of the warehouse are cleared of chemicals so that EPA can determine if offsite drainage can be stopped.
- F. The basement of the J building continues to hold water, but it continues to slowly pass into drainage which apparently conveys the water to the River. The OSC is awaiting results of environmental sampling completed by Lewis Environmental.
- G. EPA, START, and USCG continue characterization of the overall Site in an effort to locate and evaluate possible areas of hazardous or oily materials within the debris and Site. The OSC is now preparing a record of these activities.

- H. A water main broke on Front Street this day reducing the ability to suppress dust emissions in the warehouse operational area. Operations continued in zinc sulphate area.
 - I. The OSC and PADEP devised a strategy for addressing future Site issues and met with the owner of the business complex to determine his scope of future actions. OSC and PADEP informed that a workplan was necessary to document the overall plan for demolishing the structures without causing further releases to the environment and without mixing potentially separate waste streams (e.g., potentially hazardous vs. demolition debris). The owner agreed to prepare a work plan and is actively pursuing contractor support to address overall environmental and demolition issues. OSC and PADEP agreed to review and provide input into the development of this work plan. PADEP has agreed to take the lead on work plan approval and future supervision of its implementation.
- III. Future Actions
- A. Evaluate possible entry/accessways into the basement area of the chemical storage warehouse to attempt to access, identify, and plug drains and address lingering fire issues.
 - B. Continue to coordinate actions related to stabilization of the chemical warehouse location.
 - C. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
 - D. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas. Forward EPA assessment and evaluation work to Site owner and work with Site owner to finalize a work plan to address future environmental needs.
 - E. Assist the owner to keep personnel expected to return to their business locations safe from the chemical warehouse stabilization operations. The OSC has instructed USCG to brief each of these entities about emergency evacuation procedures.
 - F. Prepare plans for securing Site operations for upcoming holiday weekend.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 10

Bridgeport Industrial Park Fire ER

int. Front and Ford Sts.

Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

I. Situation (as of 1800 hrs. 24 May 01)

EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument

- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. EPA (and PADEP), Montgomery County Emergency Services, and owner's contractor representative (Lewis Environmental) maintained Unified Command for environmental issues during this days operations. EPA coordinated all environmental issues with PADEP representative onsite. This days environmental operations included continued removal of oily material from the canal and River, continued stabilization of the chemical storage warehouse, and continued Site Safety. The OSC continued to direct that EPA assets (Atlantic Strike Team) assist the owner with safety of business owners and insurance personnel on Site this day. The operational period is 0700 through 1900; oil recovery operations continue 24 hours each day.
- C. EPA air monitoring conducted this day continues to indicate no concentrations of contaminants linked to the chemicals in the warehouse. Sulfur smelling emissions (Sulfur dioxide) continue to originate from within the basement of the warehouse area.
- D. Site stabilization activities and containment of runoff waters continue to be conducted by Lewis Environmental under contract to the owner of the entire complex. The owner is actively preparing a workplan and evaluating contractors for overall Site cleanup.
- E. The OSC will remain active in directing Site safety and stabilization activities until the warehouse chemicals are stabilized (removed from the warehouse area) and the remainder of Site operations are conducted under a work plan approved by PADEP.

II. Actions

- A. Command and safety meetings were conducted this period with EPA, Bridgeport Fire, Montgomery County Emergency Services, and Lewis Environmental. Safety concerns this period continued to include increased presence of utility personnel, business owners and

insurance personnel. USCG and EPA conducted safety briefings, escorted personnel, or otherwise ensured safety of persons from chemical hazards on site. Additionally, as operations within the warehouse move forward towards Front Street, the exclusion area was moved toward Front Street as well expanding the exclusion area and further distancing the operational area from the public.

- B. Wet lead containing chemicals (lead chromate) existing on the floor of the operational area of the chemical storage warehouse was solidified and then removed to the staging area. The demolition contractor continued to remove structural hazards and facilitate chemical removal operations.
- C. The water main break on Front Street was determined to be in the private line serving the business complex. This information was brought to the Site owner. Dust suppression water lines were rerouted from other sources.
- D. Damaged plastic drums were removed from the M building area to the chemical staging area.
- E. Based upon discussions between the OSC, PADEP and the Site owner, it was agreed that stabilizing operations should begin in the oily area of M and C building where auto parts and related maintenance supplies (e.g., oils, cleaners, etc.) were stored. These areas continue to generate and discharge oil to the River (from C building area) and the canal (M building). Lewis Environmental began to remove oily debris from the M-19 building and place the debris into containers. Oily liquids pooled in this area were removed by vacuum truck.
- F. The gas company tested gas lines this day by pressurizing the system with air. A pipe near the operational area was not capped causing air to hiss and personnel to believe a gas leak was occurring. This resulted in an evacuation of the operational area and air monitoring.
- G. Two additional goslings were removed from oily areas and transported to Tri-State for rehabilitation. The OSC notified the Trustees.
- H. The basement of the J building continues to hold some water, but it continues to pass into drainage which apparently conveys the water to the River. Results of environmental sampling completed by Lewis Environmental indicate that the water contains some contaminants that can be related to the Site. PADEP and the OSC are now evaluating the need to stop this drainage. It is estimated, however, that most of this water has already leaked to the River in the past 24 hours as a blocked pipe has apparently unclogged.
- I. Results of runoff water sampling obtained by PADEP during the fire indicate contaminants similar to those identified by EPA. The runoff is characterized predominantly by MEK, acetone, naphthalene, and petroleum hydrocarbons. Other organic compounds are also present at low concentrations. Some inorganic elements are also present in the EPA data, but it is unknown at this time if these elements are solely due to fire runoff. No evidence of aquatic impact is present at this time.

- J. EPA, START, and USCG continue characterization of the overall Site in an effort to locate and evaluate possible areas of hazardous or oily materials within the debris and Site. The OSC is now preparing a record of these activities.
- K. The owner is actively working on preparation of a work plan to address future environmental issues at the Site.
- III. Future Actions
 - A. Evaluate possible entry/accessways into the basement area of the chemical storage warehouse to attempt to access, identify, and plug drains and address lingering fire issues (smouldering wood in basement).
 - B. Continue to coordinate actions related to stabilization of the chemical warehouse location.
 - C. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
 - D. Coordinate actions for evaluating remaining areas of potential environmental concern in order to facilitate future demolition or re-entry into burned areas. Forward EPA assessment and evaluation work to Site owner and work with Site owner to finalize a work plan to address future environmental needs.
 - E. Assist the owner to keep personnel expected to return to their business locations safe from the chemical warehouse stabilization operations. The OSC has instructed USCG to brief each of these entities about emergency evacuation procedures.
 - F. Prepare plans for securing Site operations for upcoming holiday weekend.
 - G. Remove oily debris from area where geese have been identified.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 11
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. Situation (as of 1800 hrs. 25 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The industrial complex is comprised of nearly 50 separate businesses housed in a former fibre manufacturing facility. Individual names of the current businesses and the name of the industrial park are not contained in this POLREP. Instead, general descriptive terminology and location information is used.
- B. EPA (and PADEP), Montgomery County Emergency Services, and owner's contractor representatives (Lewis Environmental and Alpha Environmental) maintained Unified Command for environmental issues during this days operations. EPA coordinated all environmental issues with PADEP representative onsite. This days environmental operations included continued containment and removal of oily material from the canal and River, continued stabilization of the chemical storage warehouse, staging of oily debris located in M building, and continued Site Safety. The OSC continued to direct that EPA assets (Atlantic Strike Team) assist the owner with safety of business owners and insurance personnel on Site this day. The operational period this day is 0700 to 1700, but Site operations will begin to shut down around 1400 to ensure that the Site is secure.
- C. The Site will be secured for the upcoming holiday with temporary stop-gap measures and periodic monitoring and maintenance will ensue.
- D. EPA air monitoring conducted this day continues to indicate no concentrations of contaminants linked to the chemicals in the warehouse. Sulfur dioxide emissions continue to originate from within the chemical warehouse area.
- E. Site stabilization activities and containment of runoff waters continue to be conducted by Lewis Environmental under contract to the owner of the entire complex. The owner has requested that the OSC make requests for environmental actions to owner representative Alpha Environmental. The OSC agreed to this procedure, but requested that Alpha be on site at all times or that OSC continue to advise Lewis Environmental in the absence of Alpha Environmental. The owner is actively preparing a workplan and evaluating contractors for overall Site cleanup and gearing up to take over Site safety.
- F. The OSC will remain active in directing Site safety and stabilization activities until the

warehouse chemicals are stabilized (removed from the warehouse area) and the remainder of Site operations are conducted under a work plan approved by PADEP.

- G. Based upon the covering of exposed oily and chemical materials, readiness of booms and absorbent material, and placement of plugs in identifiable MCC basement drains, the OSC determined that the Site operations could be minimized to maintenance and response status during the upcoming weekend. The installed stop-gap measures will provide temporary stabilization of chemicals and oily release. The Site will be monitored and the booms tended by Lewis Environmental contractors. The Site will be monitored and the air sampled by START contractor (Tetra Tech). The owner's environmental representative, the OSC, and Montgomery County Emergency Services will be contacted in the event of any changing situation at the Site. The OSC will notify PADEP. The owner is providing Site security.

II. Actions

- A. Command and safety meetings were conducted this period with EPA, Montgomery County Emergency Services, and Lewis Environmental. Owner representative Alpha Environmental also present at command meetings. Fire suppression operations are no longer occurring and Bridgeport fire is not a steady participant in command meetings. USCG and EPA conducted safety briefings, escorted personnel, or otherwise ensured safety of persons from chemical hazards on site.
- B. Environmental contractor (Lewis) continued to remove chemicals and debris from the chemical storage warehouse location of building M. Approximately 50% of the chemicals are estimated to be addressed at this time. Chemicals are placed in roll-off containers.
- C. START and OSC discussed the issue of Caprolactum being released into the environment as documented in the downstream water samples. Caprolactum is a very non-volatile semi-volatile and would only be present in the air as a particulate. There have been no significant elevated levels of particulates to date. Therefore it would be fair to assume that Caprolactum is not being released into the air in any significant quantity.
- D. Lewis continues to maintain boom in canal and Schuylkill River. Booms and absorbent pads are also maintained around drains on site. These booms are being tended today to prepare them for upcoming rain events. Oily debris in areas that could impact wildlife have been addressed.
- E. Stabilizing operations continued in the oily area of M building where auto parts and related maintenance supplies (e.g., oils, cleaners, etc.) were stored. This area continues to generate and discharge oil to the canal. Lewis Environmental continued to remove oily debris from the M-19 building and place the debris into containers. Oily liquids pooled in this area were removed by vacuum truck. The north end of building M-19 was diked to reduce runoff of oily material to nearby drains and inlets.
- F. Lewis covered debris and material with poly and anchored it down in preparation for weekend

shutdown.

- G. START continued onsite air monitoring. No levels above background were measured.
- H. EPA, START, and USCG continue characterization of the overall Site in an effort to locate and evaluate possible areas of hazardous or oily materials within the debris and Site. The OSC continues to add to the record of these activities.
- I. The owner is preparing a work plan to address future environmental issues at the Site.
- J. OSC requested USCG-AST to review contractors safety plan and evaluate whether the plan will cover overall site safety (i.e., safety of personnel not working in or immediately adjacent to the MCC or oil recovery work zones). At this time, the EPA Safety Plan is the plan for protecting all persons that are on Site including contractors, business persons, utility workers, etc., that are onsite and not involved in the stabilization or oil recovery operations. The OSC requested the owner to begin assumption of these responsibilities.
- K. USCG AST mobilized additional personnel to the Site to perform an entry into the basement area of MCC warehousing, inc. located beneath the current operational area and believed to contain at least some drainage pathways into the canal. The level "B" entry was made after operations in MCC Warehouse ceased for the day and securing operations were initiated. The entry team found that a significant amount of liquids and solid material from the first (grade level) floor of the warehouse has fallen through to the basement through designed spaces (e.g., grates and drainage ways) and spaces resulting from the collapse of the structure (e.g., cracks). The contaminated materials have entered open top tanks located in the basement as well as spilled upon the floor. The air space above the open tanks exhibit elevated readings on the PID suggesting VOC contamination. The amount of the liquid and solid material is unknown. The integrity of the tanks and piping integrity is unknown. Liquids on the floor are able to migrate from the evaluated basement area through pipes and other spaces located at the base of the northern wall. The entry team was able to place wooden plugs into 2 of the pipes. Another area was draining water to a deeper pit (e.g., cistern), but the outlet could not be investigated due to deep liquid levels. The entry team was unable to find safe entry into other basement areas of the MCC warehouse area. Based upon information derived from the entry team, the OSC determines that the effort has reduced, but likely not eliminated liquid migration into the canal. Further investigation will be needed. The owner will be informed of this information on Tuesday.

III. Future Actions

- A. Continue to coordinate actions related to stabilization of the chemical warehouse location.
- B. Continue to coordinate with PADEP, Borough of Bridgeport and Montgomery County to meet unmet needs and ensure appropriate environmental protection strategy and Site safety.
- C. Coordinate actions for evaluating remaining areas of potential environmental concern in order

to facilitate future demolition or re-entry into burned areas. Forward EPA assessment and evaluation work to Site owner and work with Site owner to finalize a work plan to address future environmental needs.

- D. Assist the owner to keep personnel expected to return to their business locations safe from the chemical warehouse stabilization operations. The OSC has requested that the owner transition appropriate personnel to assume the role of Site Safety.
- E. Inform owner of conditions in basement area of chemical storage warehouse.
- F. Implement Site security and maintenance over holiday weekend. Site operations are expected to begin again Tuesday 29 May at 0700.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 12
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. SITUATION and ACTIONS (as of 1800 hrs. 28 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
Temporary stabilization period
- A. This POLREP covers the holiday period (1700 25 May 01 to 0700 29 May 01) during which routine Site operations were suspended and stop-gap measures installed 25 May were relied upon to temporarily stabilize the Site from chemical and oily material release. Contractors inspected the Site periodically during this period and informed appropriate personnel (EPA, Montgomery County, owner) of any suspect or release issues.
- B. The OSC was contacted by owner representative (Alpha Environmental) and environmental contractor (Lewis Environmental) 26 May 01 regarding the migration of runoff water into a grate over the canal on the west side of the chemical storage warehouse. The water exited the operational area, migrated through the staging area, and then entered a grate over the canal. The OSC advised to improve berms already constructed to prevent this occurrence. Heavy rains have overwhelmed this system. If actions are not successful, the OSC requested tanks and pumps to be mobilized to the Site. In an emergency situation, the OSC advised that excess water be pumped into the basement of the warehouse as a last resort. The OSC was called later in the day and informed that berm improvements were successful.
- C. The OSC was contacted by Montgomery County Emergency Services on 26 May 01 regarding increased smoke from the chemical warehouse. OSC and Montgomery County Emergency Services returned to the Site on 26 May 01 at 1730 hrs, to address an area of increased smoke emission from the chemical storage warehouse. The OSC was notified by Montgomery County Emergency Services that increased smoke was evident from the MCC Warehouse area during the afternoon. The OSC called the owner and advised to have demolition contractors on standby. The OSC notified PADEP. The OSC found that increased smoke was indeed evident and that the smoke was not attributable to heavy weather and rain keeping the smoke close to the ground. Closer inspection revealed that the smoke was emanating from a pile of debris that appeared to be on the floor of the warehouse. The OSC determined that the smoke needed to be addressed since it represented a new condition that could threaten increased fire in the chemical storage area and increased emission to the community. Rain prevented useful air monitoring, but sulfur dioxide was identified downwind in the rainy weather. The demolition operator used heavy equipment to remove debris and gain access to the smoking area. The OSC found that red and orange powders were smoking

and that open flame appeared when the debris was moved. The OSC requested that START contractor review available MSDS. MSDS indicated that some of the pigments expected in that area were flammable and emit sulfur dioxide in combustion. The OSC and Montgomery County Emergency Services set up a hose line to the smoking area. The OSC directed that the operator remove debris from smoking area and expose smouldering chemical. The chemical flared several times. Water dispersed the red powder, but did not extinguish flame. After applying water to cool the area and after exposing the chemical to the water for about 60 minutes, the fire was deemed to be out. Additional hot spots were noted in the nearby areas, but they were not actively smouldering and emitting increased smoke like the area addressed this night. OSC, START, and Montgomery County demobilized at about 2100 hrs.

- D. EPA air monitoring conducted this period continues to indicate no concentrations of contaminants linked to the chemicals in the warehouse, although rainy weather on 26 May limited the usefulness of the sampling.
- E. No command or safety meetings conducted this period.
- F. Heavy rains have caused the River level to rise significantly. Inspection of 28 May 01 revealed that a pole has dislodged one of the River booms. Strong current and high River levels have overwhelmed the booms.
- G. START reports that the amount of smoke visible from the chemical storage warehouse is significantly less than previous days

II. FUTURE ACTIONS

- A. Remobilize full Site operations at 0700 hrs. 29 May 01

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 13

Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. SITUATION (as of 1900 hrs. 29 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The owner of the business park continues to conduct oil containment and recovery operations to address oily material that enters the Schuylkill River and a canal that runs under the business park. The amount of oily material that enters these waterways is significantly less than previous days. Heavy rains have washed much of the mobile material from the complex and Site operations have resulted in protective measures to prevent oily runoff outside of the complex where possible. Oily runoff continues to enter the canal through unknown pathways believed to be drainage ways serving the industrial facility formerly operating at this location.
- B. The owner of the business park continues to conduct stabilization activities in the chemical warehouse/storage area (and adjacent area of oil and automotive maintenance supply storage). The chemicals are removed from the burned and collapsed structure and placed into roll-off containers. Available inventory and MSDS allow segregation where possible, but many of the chemicals are mixed due to building collapse, burned containers, fire-fighting efforts, and significant precipitation events. The chemical warehouse is located over an area of the former fibre manufacturing facility that was constructed with a basement in which dozens of tanks, associated piping, and designed drainageways are/were located. The basement area drains through unknown pathways to the canal. EPA has been able to identify and plug at least two of these possible drainageways, but additional areas are expected based upon ongoing efforts to identify drains. At this time, the Site still allows potentially contaminated water to run uncontrolled into the canal or other unknown locations.
- C. Air monitoring parameters were reduced this day due to the near absence of smoke from the chemical warehouse area and numerous rounds of results which do not indicate release. Future monitoring will be limited to organic (PID) and particulate (RAM) monitoring. The OSC continues to work with the owner to transfer Site Safety responsibilities to the owner's representatives.
- D. The OSC continues to operate Unified Command with Montgomery County Emergency Services and owner's representatives. The OSC coordinates with PADEP. The USCG-AST and OSC function as Site Safety. Lewis Environmental is responsible for safety of their personnel in the work zones.

II. ACTIONS

- A. Safety meeting conducted at 0700. Command meeting conducted at 1600.
- B. OSC reviewed events of May 26th and indicated that caution should be exercised with smouldering chemical. Site should not be treated as only inorganic elements remaining since upcoming work areas have partial drums with material remaining within.
- C. OSC and START (tetra tech) review air monitoring data and modify future air monitoring to include organic vapor and particulate monitoring. Additional monitoring will be conducted on an as needed basis.
- D. USCG-AST and OSC advise Lewis Environmental that Level C respiratory protection should include combination cartridges for chemical protection in addition to dust protection.
- E. Lewis Environmental redeployed booms lost during weekend rain events. OSC discussed booms with PADEP and agree that three areas of booming are necessary. PADEP agreed to take the lead on boom strategy. Oily material containment and recovery continued this day. Pooled oily material was removed with a vacuum truck
- F. START (Tetra Tech) collected samples of canal discharge (near facility and in River) and a sample of water collected in a masonry tank beneath the operations area of the warehouse. Analytical results will characterize current discharge, quality at exit to River, and assist in determining urgency of completely blocking basement drainage.
- G. Lewis Environmental continued removal of chemicals from the warehouse and placing these chemicals in roll-off containers. Additionally, oily material from the auto supply storage location of M building continued to be removed this day.
- H. OSC and USCG-AST discuss transfer of Site Safety. OSC is prepared to transfer Site safety to owner representative - Alpha Environmental - when owner can assure that Site Safety plan addresses personnel other than environmental contractors onsite (Lewis Environmental work plan) and Site Safety plan includes air monitoring for organic vapors and particulates.
- I. Gas Company on Site this day to continue testing of lines and reconnection of unaffected businesses. Activity occurs in west end of Site.
- J. Tri-State Bird Rescue contacted OSC this day to inform that the 3 oiled goslings are fine. Requested contact with owner to discuss reimbursement and release of birds.
- K. Several insurance inspectors/investigators onsite this day. OSC and USCG monitored safety.
- L. START preparing maps of Site area and operations.

- M. OSC Towle and OSC Kelly completed environmental assessment of C buildings this day. This effort built upon effort begun by USCG-AST and START previously.
- N. At 1600 Command meeting, OSC advised owner to discuss booming strategy with PADEP to ensure that unnecessary boom or pads are not deployed.
- O. OSC, USCG-AST, and START entered the warehouse basement from the west end this evening to identify drainage pathways. The basement contains numerous masonry tanks with old valves and piping. Mixers, pumps, and other machinery are present. Gutters pass between some tanks to drain liquids. Water was observed migrating from somewhere beneath the operational area of the warehouse and it entered a sump and exited a pipe destined for unknown locations (canal ?). This exit will be assessed tomorrow. The air space in the basement exhibited approximately 25 ppm on PID.

III. FUTURE ACTIONS

- A. Complete environmental assessment document that identifies observed and potential environmental issues in the burned buildings. This document will assist future demolition and cleanup operations.
- B. Inform owner of need to contact Tri-State Bird Rescue.
- C. Continue to evaluate drainage from the basement area of the chemical storage warehouse. Evaluate the need to collect sample of discharging water.
- D. Evaluate owner Site Safety Plan and transfer Site Safety Officer responsibility as appropriate.
- E. Evaluate owner Site work plan for longer-term demolition and cleanup operations.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 14
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. SITUATION (as of 1900 hrs. 30 May 01)
EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The owner of the business park continues to conduct oil containment and recovery operations to address oily material that enters the Schuylkill River and a canal that runs under the business park. Oily runoff (mainly sheening with small discharges) continues to enter the canal through unknown pathways believed to be drainage ways serving the industrial facility formerly operating at this location. Discussions with PADEP have resulted in re-configuring booms to better match ongoing discharges of sheen and "burps" of oil. The linear feet of boom was reduced and the amount of pads have been reduced.
- B. The owner of the business park continues to conduct stabilization activities in the chemical warehouse/storage area (and adjacent area of oil and automotive maintenance supply storage). The chemicals are removed from the burned and collapsed structure and placed into roll-off containers. Available inventory and MSDS allow segregation where possible, but many of the chemicals are mixed due to building collapse, burned containers, fire-fighting efforts, and significant precipitation events. The chemical warehouse is located over an area of the former fibre manufacturing facility that was constructed with a basement in which dozens of tanks, associated piping, and designed drainageways are/were located. The basement area drains through unknown pathways to the canal.
- C. Efforts by OSC and USCG-AST to identify drains in the basement have revealed that the accessible basement area is a east-west trending corridor with at least five rectangular tanks along the south wall, pipe drainageways along the north wall and floor, and several sumps/pits with unknown exit points. The floor contains a large amount of chemical that has dropped through from the first floor (solid and liquid). Liquid exists in at least 3 tanks. The condition of the tanks and valves is unknown, but liquid is currently being held within. The condition of the area behind the south wall is unknown; an old print indicates that area contained "fibre tanks" and the owner has indicated that much of it was "backfilled" when the warehouse area was improved. The western edge of the basement area under the warehouse is accessible and it contains tanks, piping, gutter drains, sumps, and machinery. EPA will continue effort to determine if liquid in the footprint of the chemical warehouse can be contained/isolated from the canal and River.

- D. EPA has been able to identify and plug at least two possible drainageways in the basement area, but additional were found 29 and 30 May. USCG-AST entries have resulted in a sketch map that identifies known and potential drains from the basement area. The owner informs and OSC has observed that much of the basement area south and of the mapped area and the majority of the warehouse footprint was backfilled in the past. It is unknown if drains were removed or plugged or if chemical has dropped into these areas (the OSC has observed chemical entering the backfilled basement area at two locations thus far, most of the area is still covered by burned rubble and chemicals). The floor of the intact basement area contains trench gutters designed to convey liquids to sump areas with unknown exit locations.
- E. At this time, the Site still allows potentially contaminated water to run uncontrolled into the canal or other unknown locations.
- F. OSC and USCG-AST continue to work with owner representatives to transfer Site Safety responsibilities.

II. ACTIONS

- A. Operational period of the Site was reduced this day by owner. Work period is from 0800 to 1700. Safety and Command meetings conducted.
- B. START (tetra tech) continued air monitoring. START also working with OSC and owner to transfer air monitoring needs to owner.
- C. OSC forwarded information to owner regarding need to contact Tri-State Bird Rescue regarding 3 goslings from Site. The birds are doing fine.
- D. Additional dike/berm constructed along building C-111/C-101 area to prevent oily material in a former auto supply storage location from exiting the former building footprint during rain events.
- E. Lewis Environmental removed some boom and re-configured others to streamline oil collection and recovery areas. Lewis worked with PADEP regarding the deployment of boom. Lewis added additional boom further into River at owner request.
- F. Water company onsite today to try to shut water to M building. USCG-AST and OSC, during basement entry of 29 May, found that clean water was running through contaminated basement corridor and exiting through drain at northwest corner of chemical warehouse. The source of the water appeared to be a broken pipe along the south wall of the warehouse on the collapsed second floor. The water fell to the first floor and drained into the basement through holes in the floor. The water company successfully uncovered street valve and turned off water.
- G. OSC conducted preliminary environmental characterization of H building (old boiler house). The building is still intact but fire damaged. The building has numerous drums of unknown

materials and asbestos. Demolition contractors also onsite to evaluate requirements for demolition.

- H. Lewis Environmental continued to stabilize chemical warehouse area. Partially burned drums and containers were removed and overpacked or otherwise stabilized.
- I. OSC completed environmental assessment of C and H buildings. Documented results were forwarded to owner. No significant environmental issues were identified in J building. Portions of M building with environmental concern area subject of ongoing emergency stabilization actions.
- J. OSC determined that M building basement area needs environmental cleanup. OSC will forward request to owner.
- K. START (Tetra Tech) collected sample of basement water discharge location at northwest corner. The water originated as clean water along the south wall. The water ran down a corridor and entered a sump with a pipe at the base.
- L. USCG-AST entered the warehouse basement from the northeast corner this evening to evaluate condition of plugged holes, existing pooled liquid, liquid levels in tanks, and gather information to again determine how liquid exits the basement area. The wooden plugs set on the 25th of May were in good condition, but the pooled water identified on Friday 25 May was gone. The liquid appears to have drained out through a "sump" area between two rectangular masonry tanks. This area was under a sizable pool of liquid on the 25th. Effort will be needed to determine how liquid drains through the sump. Additional sumps/pits were identified; one passed liquid at the northwest corner. Air monitoring revealed low levels of organic compounds in the basement this day.

III. FUTURE ACTIONS

- A. Continue to evaluate drainage from the basement area of the chemical storage warehouse and efforts to plug drains or otherwise isolate the release to the canal/River.
- B. Evaluate need to remove liquid currently contained in basement tanks.
- C. Evaluate owner Site Safety Plan and transfer Site Safety Officer responsibility as appropriate.
- D. Evaluate owner Site work plan for longer-term demolition and cleanup operations.
- E. Meet with owner to discuss need for cleanup in basement area.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 15
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

I. SITUATION (as of 1900 hrs. 31 May 01)

EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement
instrument

- A. The owner of the business park continues to conduct oil containment and recovery operations to address oily material that enters the Schuylkill River and a canal that runs under the business park. At this time boom is deployed on the River as follows: 100 feet at canal discharge, 200 feet downstream at boat ramp, and three locations in the canal. Oily runoff (mainly sheening with small discharges) continues to enter the canal through unknown pathways believed to be drainage ways serving the industrial facility formerly operating at this location.
- B. The owner of the business park continues to conduct stabilization activities in the chemical warehouse/storage area (and adjacent area of oil and automotive maintenance supply storage). The chemicals are removed from the burned and collapsed structure and placed into roll-off containers. Available inventory and MSDS allow segregation where possible, but many of the chemicals are mixed due to building collapse, burned containers, fire-fighting efforts, and significant precipitation events. The chemical warehouse is located over an area of the former fibre manufacturing facility that was constructed with a basement in which dozens of tanks, associated piping, and designed drainageways are/were located. The basement area drains through pathways believed to lead to the canal.
- C. At the request of the OSC, Lewis Environmental conducted effort this day to remove contaminated liquids from the tanks in the basement. Liquids formerly pooled on the floor are gone and believed to have migrated through a sump area on the floor. The OSC also requested that sludge-like materials be removed from 2 identified sumps in an effort to determine how liquids may be exiting the basement area.
- D. At this time, the Site still allows potentially contaminated water to run uncontrolled into the canal or other unknown locations.
- E. OSC and USCG-AST continue to work with owner representatives to transfer Site Safety responsibilities. Owner representative Alpha Environmental initiated air sampling this day.

II. ACTIONS

- A. Safety and Command meetings conducted.
- B. OSC requested a meeting with owner to transfer responsibility of Site Safety to the owner, deliver overall assessment document, inform owner of concerns about basement of chemical warehouse, and related matters.
- C. Lewis Environmental continues operations in the warehouse area. Approximately 75% of the warehouse footprint is completed. Remaining area is mix of large debris, small debris, and chemicals since the second floor is collapsed into the first floor. With dry weather, dust is becoming more of an issue. Water sprays are used to address this issue.
- D. Lewis used kiln dust to dry up large oily area of M building (Auto Supply storage). The area is known to exist over at least one hole that has allowed oily material to enter the basement area of the chemical storage warehouse. Additionally, a manhole in the building enables entrance into the canal. Today's efforts will begin to remove oily residual liquids from the building.
- E. OSC combined USCG-AST and OSC assessment products into one document. The assessment of the potential environmental or safety hazards will be forwarded to the owner.
- F. Lewis Environmental removed boom which is no longer needed from containment areas this day.
- G. OSC and USCG-AST discuss Site Safety and readiness of owner to assume this role. The OSC will inform the owner of SSHO requirements and pertinent OSHA requirements. Plans in place provide for suitable monitoring to protect nearby community. Safety Plan document and qualifications of personnel need to be resolved.
- H. OSC requested owner to remove liquids in tanks in the M building basement area investigated by USCG-AST. Lewis Environmental mobilized vacuum truck and has begun to remove liquids from the tanks.
- I. OSC requested owner to remove debris/sludge from 2 identified sumps. Based upon patterns of retreating water and observations of water flow, these sumps play a role in liquid migration from the basement. Lewis used the vacuum truck this day to remove pumpable liquids/sludges from one of the sumps.

III. FUTURE ACTIONS

- A. Continue to evaluate drainage from the basement area of the chemical storage warehouse and efforts to plug drains or otherwise isolate the release to the canal/River.
- B. Evaluate owner Site Safety Plan and transfer Site Safety Officer responsibility as appropriate.

- C. Evaluate owner Site work plan for longer-term demolition and cleanup operations.
- D. Meet with owner to discuss need for cleanup in basement area.

Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

POLREP 16
Bridgeport Industrial Park Fire ER
int. Front and Ford Sts.
Bridgeport, Montgomery County, PA 19405

ATTN: RRC
C. Kleeman

- I. SITUATION (as of 1900 hrs. 01 June 01)
 - EVENT: CERCLA Emergency Response
Oversight of PRP emergency stabilization activities without enforcement instrument
- A. The OSC determined that the emergency response phase of this incident is over thus ending the full time involvement of the federal OSC and the OSC's assets. Site responsibility for cleanup and Site Safety have been turned over to the owner. The OSC has made this determination after significant federal and State efforts have resulted in the installation of containment devices, processes, and actions that have resulted in the minimization of off-Site releases of oily material and hazardous substances. Although significant cleanup work remains to be implemented, the owner has agreed to accomplish this work under a work plan to be approved by the State of Pennsylvania. The OSC will remain involved in this process to ensure that upcoming work does not result in a release to the environment. At this time, the Site poses a threat to human health and the environment. The OSC will prepare an endangerment determination and prepare to monitor upcoming cleanup efforts and be ready to implement additional controls necessary to protect human health and the environment.
- B. The OSC has directed that all identified drains or pipes in the basement of the chemical storage warehouse be plugged or cemented shut. The five pipes or drains suspected to or identified as enabling the migration of liquids from the basement to the canal or other unknown locations have been plugged or cemented shut. The basement should contain the liquids generated by rain events. The OSC has requested that the environmental contractor maintain watch over these liquid levels and ensure that increased liquid levels do not find additional unidentified exit points in the basement area.
- C. The OSC and PADEP have met with the owner of the business complex and again advised the owner of his responsibility to continue to conduct environmental cleanup actions. PADEP and the OSC have previously requested that work be conducted pursuant to a work plan to be submitted to and approved by PADEP (the OSC will also review). The owner has been advised that EPA will stay involved to ensure that upcoming work efforts do not pose additional threat to the environment. The owner has agreed to conduct environmental work. The OSC has forwarded all environmental information generated by EPA during response efforts of the past 15 days.
- D. PADEP and the OSC are comfortable that ongoing efforts, as conducted, and containment devices will protect the environment from ongoing or potential releases from the fire scene.

II. ACTIONS

- A. Safety and Command meetings conducted. At the end of the day a final meeting was conducted to inform all contractor personnel of the Site status, the government's expectation of continued work, and the transfer of Site Safety to the owner. The OSC and PADEP will continue to monitor cleanup efforts and expect a work plan for upcoming efforts in the near future.
- B. OSC and PADEP held a meeting with owner to transfer responsibility of Site Safety to the owner, deliver overall assessment document, inform owner of concerns about basement of chemical warehouse, and related matters. The owner was informed of his responsibilities to continue cleanup in a manner that does not pose a threat to human health and the environment.
- C. Lewis Environmental continues operations in the warehouse area. Approximately 80% of the warehouse footprint is completed. Remaining area is mix of large debris, small debris, and chemicals, primarily inorganic pigments. Water sprays are used to lessen dust releases.
- D. Site owner contractor Alpha Environmental conducts air monitoring. Monitoring results do not indicate increased releases from the Site; although dry kiln dust is migrating in wind gusts.
- E. OSC forwarded a Post-Fire Incident Assessment document to the owner. The document identified areas of environmental concern identified by the OSC and USCG-AST during inspections of buildings. The document contained some recommendations for cleanup strategy.
- F. OSC transferred Site Safety responsibility to the owner. The OSC also gave the owner a memo identifying the OSC's air monitoring and safety role. The OSC also forwarded portions of 29 CFR 1910.120 regarding the need for a safety plan and qualified safety officer.
- G. Lewis Environmental continued to removed liquids from tanks in the basement of the chemical storage warehouse.
- H. The OSC directed that sludge and liquids be removed from the sump identified in the basement. One of the sumps originally was under a large pool of contaminated water. Once cleaned, the sump had 2 pipes that had allowed water to pass from the basement area. These pipes were plugged. Another sump also had a pipe that passed water; the pipe was plugged. USCG-AST inspected these pipes and plugs at the end of the day and reported that each of the identified pipes in the basement area that did or may have passed water from the basement area have been plugged.
- I. The OSC requested that owner maintain inspection of the liquid levels in the basement. Allowing the liquid level to rise could cause release from a yet identified area. Most of the remainder of the basement is inaccessible since it was backfilled by the owner.

- J. At the end of the day, the OSC deemed that the emergency response phase of the incident was over since the owner was actively stabilizing the warehouse area (remaining chemicals pose reduced threat, the owner was actively removing oily debris from areas known to drain into the canal, the owner was maintaining oily material containment and recovery responsibilities, and identified drain pipes from the warehouse basement have been plugged. Although additional cleanup activities remain, these activities will be conducted by the owner with monitoring from OSC and PADEP.

III. FUTURE ACTIONS

- A. Evaluate owner Site work plan for longer-term demolition and cleanup operations. Assist PADEP with review and initial monitoring efforts.
- B. Prepare an endangerment determination to ensure that EPA is ready to respond should the owner discontinue ongoing cleanup efforts.

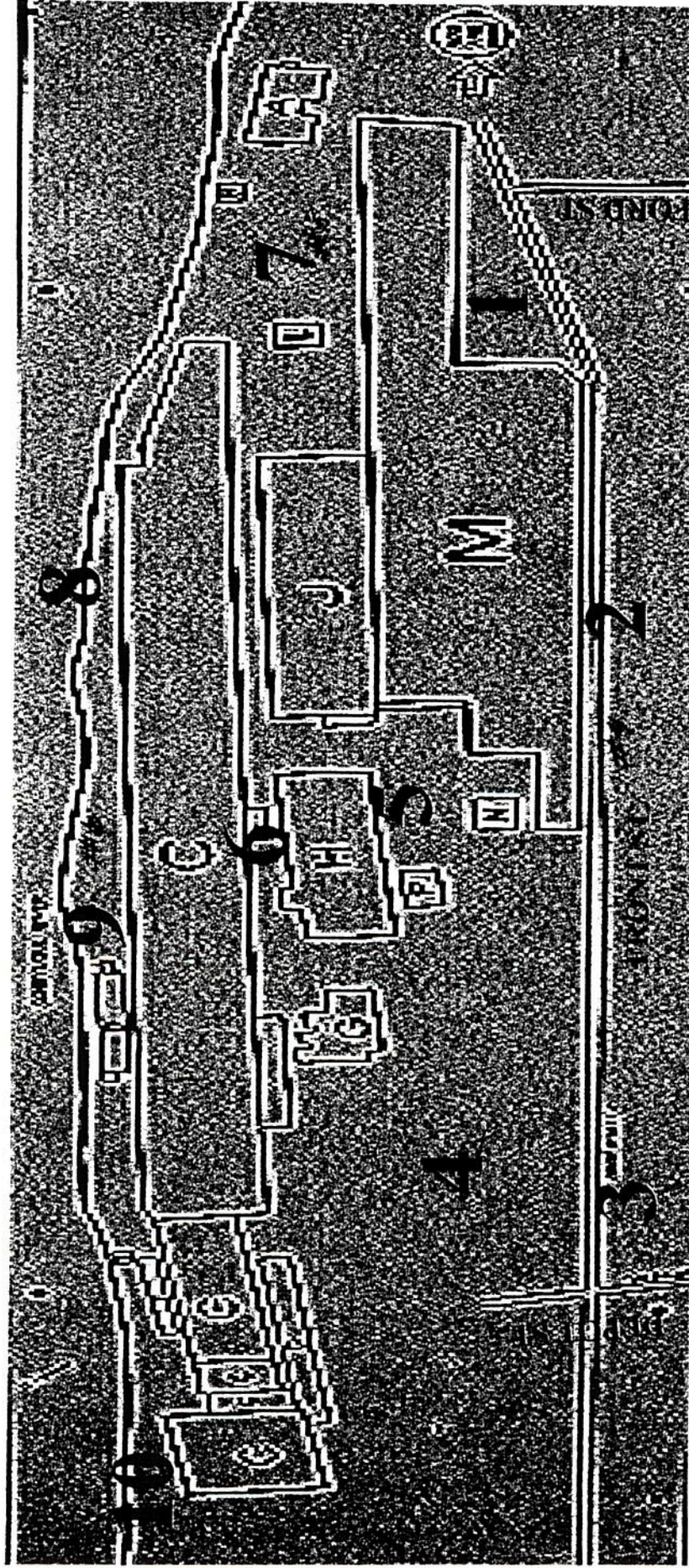
Michael Towle, OSC
EPA Region III
Philadelphia, PA 19103

APPENDIX 12

AIR MONITORING LOG (with station location figure)

CONTINENTAL BUSINESS COMPLEX

Air Monitoring Locations



BRIDGEPORT FIRE AIR MONITORING LOG

UPDATED: 5/19/01 at 1050

| STATION LOCATION | DATE | TIME | AIR MONITORING INSTRUMENT USED | | | | | DETECTOR TUBES | | Notes |
|---------------------|---------|-------------|--------------------------------|-----------|-------------------|---------------|------------|----------------|--|---|
| | | | FID (ppm) | PID (ppm) | HCN MONOTOX (ppm) | Type(s) | Result | | | |
| 1 - 5 | 5/17/01 | 1330 - 1405 | 0 | 0 | 0 | Amines, HCl | Non detect | | | |
| 1 - 7 | 5/17/01 | 1830 - 1910 | 0 | 0 | 0 | None | | | | |
| 1 - 10 | 5/18/01 | 1410-1445 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1 - 10 | 5/18/01 | 1530 - 1610 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1 - 5 | 5/18/01 | 1745 - 1845 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 6 - 7 | 5/18/01 | 1745 - 1845 | 0 | 5.1 | 0 | Acids, amines | Non detect | | | |
| 8 - 10 | 5/18/01 | 1745 - 1845 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1 - 10 | 5/19/01 | 0715 - 0750 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1 - 10 | 5/19/01 | 0945 - 1030 | 0 | 0 | 0 | Acids, amines | Non detect | | | Rad survey conducted. No levels above background. |
| 1 - 6 | 5/19/01 | 1140 - 1215 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 7 | 5/19/01 | 1140 - 1215 | 1.9 | 0 | 0 | Acids, amines | Non detect | | | |
| 8 - 10 | 5/19/01 | 1140 - 1215 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1-5 | 5/19/01 | 1445-1430 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1-10 | 5/19/01 | 1610-1700 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1-10 | 5/19/01 | 1745-1815 | 0 | 0 | 0 | Acids, amines | Non detect | | | |
| 1 - 10 | 5/20/01 | 0825 - 0850 | 0 | 0 | 0 | Acids, amines | Non detect | | | |

FID- Flame Ionization Detector for organic compounds

PID- Photo Ionization Detector for inorganic or organic compounds

HCN Monotox- Hydrogen Cyanide Gas

Detector Tubes- Chemical Specific for organic compounds (i.e. amines, ammonia, hydrochloric acid, cyanide)

Bridgeport Fire Dust Monitoring Log

[illegible]

PDR - personal data ram, measures particulate matter in air

STEL - short term exposure level

TWA - time weighted average

APPENDIX 13

TABLE OF MCC WAREHOUSE INVENTORY CHEMICALS AND DECOMPOSITION PRODUCTS

BRIDGEPORT FIRE ER
Chemical Inventory & Decomposition Products for Materials Previously Stored at
the MCC Warehousing Inc Facility (Building M)

| Chemical ID | Ingredients | Decomposition Products |
|-----------------------------------|--|--|
| Pentachem | | |
| Beckosol AA-141 | Alkyd resin Mineral spirits Xylene Ethyl Benzene Toluene | Carbon monoxide Toxic vapors |
| B.O.N. Rubine | CI Pigment Red | Toxic gases including oxides of carbon and/or nitrogen |
| Cyasorb UV-3853S Light Stabilizer | | Carbon monoxide, carbon dioxide, oxides of nitrogen |
| SICO Yellow NBD 1360 | Aluminum silicate hydrated CI Pigment yellow 14 surfactant | Colored monazo dyes 3,3-dichlorobenzidine |
| SICOTAN Yellow L 1012 | CI Pigment yellow 53 Nickel Antimony Aluminum monohydrogen phosphate Bis(3-aminopropyl)ethylenediamine | None listed on MSDS |
| SICOTRANS Red L 2917 | Pigment (ferric oxide) | None listed |
| Aerosol C-61 surfactant | Isopropanol Octadecylamine-octadecylguanadine polyoxyethanol Ethylene glycol | Carbon monoxide Carbon dioxide Ammonia Hydrogen cyanide Oxides of nitrogen |
| 3-amino-4methoxy-benzanilide | None listed in MSDS | None listed in MSDS |
| Barium lithol | CI pigment red Barium salt Petroleum hydrocarbon resin Petroleum distillates | Carbon monoxide Carbon dioxide Nitrous oxides chlorides |
| Paliogen Red L3675 | Red pigment Nickel | Carbon monoxide Carbon dioxide Nitrous oxides |
| Paliotol Black L0080 | CI Pigment black Barium sulfate Chromium VI | Carbon monoxide Carbon dioxide Nitrous oxides |
| Permanent red 2B | CI Pigment red | Toxic vapors Oxides of nitrogen and carbon |
| Phthalo blue | Copper Zirconium oxide Pigment | Carbon monoxide Carbon dioxide Nitrous oxides |
| Quindo Red | Barium sulfate Neodecanoic acid | Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Quindo violet | Barium sulfate | Carbon monoxide Carbon dioxide Nitrous oxides |
| Rhodamine B PMA | CI pigment violet | Oxides of carbon and nitrogen Toxic gases and vapors |

| | | |
|----------------------------|---|---|
| Rhodamine YS SMA | CI pigment red Kaolin clay | Carbon monoxide Carbon dioxide Nitrous oxides |
| RLC (Red Lake C) | CI pigment red | Carbon monoxide Carbon dioxide Nitrous oxides |
| Lithol fast scarlet L4300 | CI pigment red Manganese pigment Barium sulfate Sulfurized castor oil Titanium dioxide | Carbon monoxide Carbon dioxide Nitrous oxides |
| Lithol Rubine D4566 DD | Kaolin CI pigment red Calcium resinate | None listed in MSDS |
| Luwax 9675 wax powder | 1-propene homopolymer | None listed in MSDS |
| Micronal B50 | Formaldehyde Diethanolamine Ammonium formate Melamine-formaldehyde copolymer Diisopropyl-naphthalene Petroleum distillates | Formaldehyde Carbon monoxide Carbon dioxide |
| SICO fast orange NB D 2851 | pigment | Colored azo dyes 3,3-dichlorobenzidine |
| SICO red NBL 3751 | CI pigment red Sulfonated castor oil Sodium salt 2-naphthalenol | Carbon monoxide Carbon dioxide Nitrous oxides |
| SICOPAL brown K2795 | pigment | None listed in MSDS |
| SICOPAL yellow L1112 | Cerium oxide Bismuth molybdate Bismuth vanadate molybdenum | None listed in MSDS |
| SICOPLAST red NB 36-0330 | CI pigment yellow Nickel Antimony Orange pigment | None listed in MSDS |
| SICOTAN yellow K2001 FG | CI pigment brown Chromium III antimony | None listed in MSDS |
| SICOTRANS yellow L1916 | CI pigment yellow | None listed in MSDS |
| Bruggeman | | |
| Bruggolen C10 | Caprolactam Caprolactam sodium salt | Hydrogen cyanide Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Bruggolen C20 | Caprolactam Caprolactam hexanediisocyanate prepolymer Hexamethylene-1,6-diisocyanate | Hydrogen cyanide Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Bruggelen P22 F | Polyamide Amorphous alumina silicate | Ethylenediamine Carbon monoxide Carbon dioxide Oxides of nitrogen Oxalic acid |

| | | |
|-----------------------|--|--|
| Bruggolite E01 Powder | Methanesulfinic acid, hydroxy sodium salt Sodium carbonate formaldehyde | Carbon monoxide Carbon dioxide Oxides of sulfur |
| Zinc carbonate AC 45 | Zinc oxide Zinc carbonate Zinc hydroxide | Carbon monoxide Carbon dioxide Oxides of zinc |
| Bruggolen H20 | N,n-diphenyl-1,4-phenylenediamine Quinoline based polymer | Hydrogen cyanide Carbon monoxide Carbon dioxide Oxides of nitrogen & phosphorous |
| Bruggolen H21 | Quinoline based polymer Phosphoric acid, salt | Hydrogen cyanide Carbon monoxide Carbon dioxide Oxides of nitrogen & phosphorous |
| Bruggolen H320 | Potassium bromide Potassium halogenide Cuprous iodide Fatty acid derivatives | Carbon monoxide Carbon dioxide Oxides of copper Iodine Hydrogen iodide |
| Bruggolen L20 | Ester Phosphite derivative | Oxides of nitrogen Cyanides Phosphoric & sulfuric compounds Carbon monoxide Carbon dioxide |
| Bruggolen C20 P | Caprolactam Caprolactam hexanediisocyanate prepolymer Hexamethylene-1,6-diisocyanate (HDI) | Hydrogen cyanide Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Bruggolen C230 | Aliphatic polyisocyanate 1-methyl-2-pyrrolidinone Hexamethylene-1,6-diisocyanate (HDI) | Hydrogen cyanide Carbon monoxide Carbon dioxide Oxides of nitrogen Traces of HDI |
| Bruggolen C540 | polyamine | Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Bruggolite FF6 | Sodium salts of sulfur-oxy acetic acids Sodium sulfite water | Carbon monoxide Carbon dioxide Oxides of sulfur |
| Bruggolen H10 | Phosphonic acid Disodium salt | Oxides of phosphorous |
| Bruggolen H321 | Potassium bromide Potassium halogenide Cuprous iodide Fatty acid derivatives | Carbon monoxide Carbon dioxide Iodine Hydrogen iodide Oxides of copper |
| Bruggolen H3346 | Waxes Copper and halogen compounds | Carbon monoxide Carbon dioxide Oxides of nitrogen, phosphorous, and copper |
| Bruggolen M10 | Carboxylic acid derivative Silicon dioxide Hexanedioic acid Bis(2-ethylhexyl) ester | Carbon monoxide Carbon dioxide |

| | | |
|-------------------------|---|---|
| Bruggolen P31 | Fatty acid derivative Polymer Amorphous alumina silicate | Carbon monoxide Carbon dioxide Oxides of nitrogen and phosphorous Cyanides phosphines |
| Bruggolite E01 Granules | Hydroxy-methanesulfinic acid Sodium salt Sodium carbonate formaldehyde | Carbon monoxide Carbon dioxide Oxides of sulfur |
| Zinc oxide AC 100 | Zinc oxide | Oxides of zinc |
| Zinc oxide RAC | Zinc oxide Lead sulfide | Oxides of zinc, lead, and sulfur |

Energy Tech

| | | |
|---|---|--|
| Super ceramic repair putty hardener | Phenol Triethylenetetramine Formaldehyde polymer with phenol and TETA | Organic amines Ammonia Oxides of carbon and nitrogen |
| Chockfast blue hardener | Triethylenetetramine Tetraethylenepentamine Bisphenol A Amidoamines | Oxides of carbon Oxides on nitrogen Ammonia |
| Duraseal 6000 hardener | Diethylene triamine (DETA) 4,4-(1-methylethylidene) bisphenol modified aliphatic polyamine propylene glycol monomethyl ether isopropyl alcohol methyl isobutyl ketone toluene | Carbon dioxide Carbon monoxide Oxides of nitrogen |
| Acid resistant trowelable floor resurfacer hardener | Benzyl alcohol Isophorone diamine Salicylic acid | Ammonia Oxides of nitrogen Oxides of carbon |
| Phillyclad 200 deck gray aggregate | Iron aluminum silicate Carbon black Aluminum trihydrate Calcium carbonate | None listed in MSDS |
| Phillyclad 200 resin | Ethyl benzene Toluene Xylene Toluene-1,3-diisocyanate Urethane polymer | Oxides of carbon Oxides nitrogen Hydrogen cyanide Volatilized isocyanates |
| Phillyclad 2001 deck gray resin | Propylene glycol monomethyl ether Methyl isobutyl ketone Xylene Carbon black Crystalline silica Polymers of epoxy resin Bisphenol A diglycidyl ether resin Phenol, polymer with formaldehyde, glycidyl ether Acrylic acid, 2-ethoxyethanol diester Light aromatic naphtha 1,2,4-trimethyl benzene blocked polyisocyanate | Carbon monoxide Carbon dioxide Other toxic gases |

| | | |
|---|---|---|
| PRT –60 Solvent | Methyl isobutyl ketone toluene | Carbon monoxide Carbon dioxide |
| Super ceramic repair liquid color additive | Diacetone alcohol Carbon black | Carbon monoxide Carbon dioxide Other organic vapors |
| Durr | | |
| Lead chromate pigment/molybdate orange | Lead chromate Lead sulfate Molybdenum compounds Chromium Antimony trioxide | Oxides of lead, chromium, & antimony |
| Hansa yellow | None listed | Oxides of nitrogen and carbon |
| Butrol 23 | Zinc oxide Barium metaborate monohydrate | Solubilized barium salts |
| Busperse 47 | proprietary | Oxides of carbon & nitrogen |
| Busan 1078 | 2-methyl-4-isothiazolin-3-one 5-chloro-2-methyl-4-isothiazolin-3-one magnesium nitrate | Sulfur dioxide Hydrogen chloride Oxides of nitrogen |
| Busan 11-M2 | Barium metaborate monohydrate | Solubilized barium salts |
| Busan 11-M1 | Barium metaborate monohydrate | Solubilized barium salts |
| Busan 1025 | 2-(thiocyanomethylthio)benzothiazole methylene bis(thiocyanate) aromatic solvent n-methyl-2-pyrrolidone naphthalene | Cyanide salts Hydrogen cyanide Sulfur dioxide Oxides of sulfur, nitrogen, and carbon |
| Busan 1024 | Formaldehyde 1-methyl-3,5,7-triaza-1- azoniatricyclodecane chloride | Oxides of carbon and nitrogen Hydrogen chloride Ammonia Methylamine Dimethylamine Trimethylamine |
| Bulab flamebloc 428 | particulates | Carbon monoxide Carbon dioxide |
| Sachtolith | Zinc sulfide | Hydrogen sulfide |
| Kemira | Titanium dioxide Aluminum hydroxide Amorphous silica Amorphous zirconium dioxide | None listed in MSDS |
| Blanc-fixe | Barium sulfate | Sulfur dioxide Sulfur trioxide Barium sulfate |
| Yellow T.Y. | None listed in MSDS | Oxides of nitrogen and carbon Organic vapors |
| Bon Maroon | Manganese compounds | Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Toluidine red | None listed in MSDS | Carbon monoxide Carbon dioxide Oxides of nitrogen |
| Pyrazolone orange | None listed in MSDS | Carbon monoxide Carbon dioxide Oxides of nitrogen |

APPENDIX 14

NOTES OF OWNER ENVIRONMENTAL FILES

Summary Notes for Review of
File Information Maintained by
Bushor Corp. © Commercial Business Center
(21 May 2001)

1015

* Sept - Oct 1999 Received two bids ~~Alpha~~
All American Eagle, (b) (4) 610-430-6294,
(TIER DE, Inc. (b) (4) 610-873-2488,
for removal of (3) 25,000 gallon sodium
hydroxide tanks. Liquid removal, cleaning
Alpha Environ (b) (4) 610-892-7714)
recommended All American

- May 11, 1993 - Letter from Waste Consulting and
Brokerage Services (b) (4) 610-215-6280,
transformer oil test reports negative for
it was non-haz. Bid to dispose of it
• Letter same date a sender as a time
bid to remove sulfuric acid solids drums
- waste doesn't contain RCRA reg.
solvents, "California List" halogenated
organic carbon at conc. greater than
1,000 ppm

4/9/86 Applied Health Physics removed
12 Beta Ray Sheet Weight Profiler

• 6/5/98 Waste Manifest from Safe Transport
(800-222-1048) C&P yards being
removed sent to Wetzel County Landfill

• 1/29/98 Letter from Alpha C (b)(4) mentioning
invoices from Terra Erosion. for a sodium
hydroxide spill

- Terra Eros (b)(4) (610) 647-1300
proposal for removal of tanks from
tank farm building. Assumed tanks
had caustics

• ~~7/30/97~~ Analy results of unknown liquid
pH 12

• 1/29/98 Alpha receipt for ^{payment for} above

• 10/11/90 Analy results for 3 drums found along
river bank behind C-888, ^{results of} etc

• 10/6/94 Cert that 26.33 tons of
non-haz petroleum cont. soil destroyed
Dug up during pipe trench Found three
drums. dug them up core had high
levels of benzene

• 10

(b) (4)

- Alpha Environmental Inc.

(610) 932-0711

P.O. Box 46

(215) 984-2126 (pager)

Nottingham, PA 19362-0046

Front St. tanks (handwritten correspondence)

✱

- ① closest to street - $\frac{1}{3}$ full dried white crystals (smells like formaldehyde)
 - ② small amt. liquid - may be water
 - ③ $\frac{1}{4}$ unknown liquid
-

3/31/95
corresp.

| | |
|-----------------------------|------------------------------------|
| Bldg B - Corwell (knot) - | ~ 200 ft. of 4" or less (Asbestos) |
| C-123 - Shikaden Inc (knot) | 35 ft. overhead aers |
| C-127 - MCC, Inc. (knot) | 80 ft. overhead aers |
| Bldg. H - ? ? ? | 400 ft. various pipes |
| J-119 - Chain Mar Furniture | 123 ft. pipe |
| M-15 - Basement | 125 ft. 6" pipe |
| M-135 - ? ? ? ? | 650 ft. various pipe |
| M-235 | 1,293 ft. " " |
| M-255 - | 120 ft. " " |
| M-335 | 50 ft. " " |
| M-Bldg. B - basement | 100 ft. pipe |

December 21, 1992 - Environmental Site Assessment conducted by

Environmental Hazards Services, Inc.

2316 Meekinsville Rd

Boothwyn, PA 19061

(215) 485-4500

- 25 acres / 13 buildings (light manufacturing, warehousing, & offices)

- formerly used for mfg. industrial gaskets - owned by Budd Company

ACM

Blg 3 200 linear ft.

C115 40 " "

C123 40 " " plus ends

C127 300 " " plus ends

Blg H 400 " "

J119 123 " "

J217 650 " "

J301 1135 " "

Blg J Basement 250 " "

M-1 to M-15 Basement 125 " "

M101 564 " "

M135 1,006 " "

M201 760 " "

M235 1,293 " "

M255 120 " "

M335 50 " "

M Blg B 100 " "

Old Baker House 3,000 " "

↓
continued

PCBs - report indicates none present (all < 50ppm)

* USTs - none identified

ASTs

- * (1) sulfuric acid crystals (was being removed)
(2) 100,000 gal. AST - #6 oil
(3) 3,000-gal. AST - hardened resin

Urea Formaldehyde Foam Insulation - none identified

Lead Based Paint - none identified

Chemicals

C-241 steel - O₂ cylinders, diesel, gasoline, & acetylene
C-127 (mcl) "drums"

DAS Environmental, Inc.
2516 East Ontario St.
Phila, PA 19134
(215) 739-3445

10/26/88
invoice for "asbestos abatement work"
in J-101 & J-201

10/14/88
invoice for asbestos abatement
in C-101, C-111, C-146, C-198, C-221, C-241

12/2/88 invoice
in C-221

5/19/89 invoice & manifest
in C-145 through C-179

7/21/91 manifest

2 yds ACM removed from MCL & Label Risk

6/30/95 notice for T&D of PCB capacitors (>500ppm)
manifests

October 23, 1996

manifests & CDs for:

~~2 drums~~ NaOH (2/8/96)

19 drums NaOH (1/5/96)

also references formaldehyde tanks as heavily benched by
Environmental Disposal Options (EDO) Corp @ same time
as NaOH, but not listed on manifests
← (paraformaldehyde)

PA Dept. of Environ. Resources

Preliminary Assessment for Reclamation Resources ^{PA# 0449}
↑
former tenant

- RRI - ~ 1976-1981

- used site for drum storage

- drums removed in 81 under order

- ~~conclusion~~ was bldg had been cleaned & no further hazard

July 18 1988 - DAS Environmental Inc. (correspondence)

DAS had responded to spill on July 15, 1988 - spill occurred during

excavation for ^{new} sewer line - "tar-like substance leaking onto ground"

excavated ~ 20 drums - sampled - found to be "ignitable" & also
contained ACM

11/12/96 ^{invoice} manifest for T&D of 3 drums ^{waste} formaldehyde

December 91

tank sludge from C-198 - lab data shows as non-haz.

11/29/93 ^{J&J} invoice for disposal & analytical for
tank @ m101 entrance (vac truck ops) - 300 galls.
tank was 4' diam. & 13' length

9/93 ^{J&J} invoice for "cleaning a 100,000 gall. # 6 oil tank in prep for scrapping"
4/94 shows charges for T&D of tank bottoms/solids

April 25, 1994 ^{invoice} "manifest" for:

7 drums waste sulfuric acid solids

2 drums " " " wastewater

5/29/84

Blog 3 transferor data = non-PCB

APPENDIX 15

PHOTODOCUMENTS

- Contained in EPA Site File -

